



# Hasanuddin Journal of Strategic and International Studies

ISSN: 2963-1394 (Online) Journal Homepage: <https://journal.unhas.ac.id/index.php/hjsis/>

---

## The Global and Indonesian Landscape on Child Vaccination, Immunization, and Gender

Pahruroji, Asra Virgianita

To cite this article:

Pahruroji, & Virgianita, A. (2024). The Global and Indonesian Landscape on Child Vaccination, Immunization, and Gender. *Hasanuddin Journal of Strategic and International Studies (HJSIS)*, 3(1), 1-15.

To link to this article:

<https://doi.org/10.20956/hjsis.v3i1.36123>

---

### Published by Hasanuddin University

Hasanuddin Journal of Strategic and International Studies (HJSIS) is an open-access and international peer-reviewed journal. Our main objective is to disseminate current and original articles from researchers and practitioners that enrich understanding and contributes to the past, current, and future discourse and issues of strategic and international studies relevant to the Indo-Pacific region. The article should address multidisciplinary research on theoretical and empirical questions in the topic around strategic studies, international relations, international politics and security, international political economy, transnational society, international diplomacy and negotiation, international and regional organization, governance & democracy, terrorism and transnational organized crimes. HJSIS encourage a robust analysis and rigorous methodologies (quantitative or qualitative or mix-method) written in an engaging and analytical article style so that it promotes new ideas, discourse, controversy, and solid reflection theoretically or practically toward Indo-Pacific's strategic and international studies issues.



Hasanuddin  
University

# The Global and Indonesian Landscape on Child Vaccination, Immunization, and Gender

Pahruroji<sup>1</sup>, Asra Virgianita<sup>2,\*</sup>

<sup>1,2</sup>Department of International Relations, Faculty of Social and Political Sciences, Universitas Indonesia, Indonesia

---

---

## Abstract

This article discusses the complex dynamics of vaccination, child immunization, and gender within the global and Indonesian landscapes. It highlights the intricate relationship between policies, cultural norms, economic conditions, and social challenges that influence vaccination status and access to immunization services. The study employs a literature review approach to examine various sources, including international frameworks, government policies, and scientific research, to explore the intersectionality of gender and immunization in Indonesia. Findings from this article underscore the crucial role of gender in shaping vaccination status and access to immunization services, particularly in Indonesia, where disparities persist despite efforts by the government and international aid organizations. Recommendations included aiming to achieve vaccination goals. Recommendations include improving data collection, implementing gender-responsive policies, combating misinformation, strengthening healthcare systems, promoting community engagement, and empowering women and fathers to actively participate in healthcare decision-making and immunization advocacy, ultimately aiming to achieve vaccination goals.

## Key Words

International Aid, Vaccination Disparities, Child Immunization, Health Policies, Gender

---

---

## 1. Introduction

Immunization has been recognized as one of the most effective public health interventions in history, saving millions of lives since its introduction through the Expanded Immunization Program in 1974. However, issues of inequality in access and vaccine usage persist as ongoing global challenges. The Immunization Agenda 2030 (IA2030) has become a significant focus in efforts to address these issues and ensure that the benefits of vaccines are felt by everyone, regardless of age or location. Yet, achieving these goals requires focused and committed actions from governments and stakeholders in the field of immunization (Burke & Speer, 2024).

At the international level, the landscape of immunization and vaccination is rapidly evolving, particularly in the context of global efforts to address the COVID-19 pandemic. Initiatives such as IA2030 and the Global Vaccine Safety Blueprint by the World Health Organization (WHO) have had a significant impact on improving vaccine safety, access, and equity in vaccine distribution worldwide. However, challenges in policy implementation persist, necessitating sustained efforts to address them (Bliss, 2024; WHO, 2024).

In Indonesia, updates in the immunization landscape have been made through national policies such as the National Immunization Program (NIP) and the Expanded Program on Immunization (EPI). However, the successful implementation of these policies is hindered by

---

\*CORRESPONDENCE Asra Virgianita | asrahiui@ui.ac.id | Department of International Relations, Faculty of Social and Political Sciences, Universitas Indonesia, Depok, West Java, Indonesia.

issues such as inadequate funding, human resource gaps, and a lack of focus on immunization policy equity. To address these challenges, greater collaborative efforts from the government and immunization stakeholders are needed (WHO, 2024).

In the context of gender dynamics, the role of women in the Indonesian immunization landscape is crucial, both as healthcare providers and decision-makers. However, gender gaps in representation at the leadership level and social norms governing gender roles can affect access to and usage of vaccines in society. This underscores the need for gender-responsive immunization policy approaches to ensure equitable access for all (Heidari-S. et al., 2024; Bliss, 2024).

Studies by Burke and Speer (2024) highlight the importance of gender equality in improving immunization services, emphasizing how gender-related barriers can hinder access to healthcare services. They advocate for gender equality as a key to ensuring that all individuals can access and benefit from immunization services fairly. This study strengthens the argument for supporting gender-responsive immunization policy approaches to effectively address these barriers.

Debates about the effectiveness and challenges of immunization policy implementation highlight its crucial role in maintaining public health. With a focus on global efforts such as the Immunization Agenda 2030 (IA2030) and the Global Vaccine Safety Blueprint by the World Health Organization (WHO), several studies depict how international initiatives aim to improve access and equity in immunization, despite facing complex challenges. However, based on the previous discussions, further studies are crucial to better understand gender dynamics in the context of immunization in Indonesia. While policies such as the National Immunization Program (NIP) and Expanded Program on Immunization (EPI) strive to provide essential vaccines, challenges such as funding shortages and gender gaps remain unresolved issues.

Therefore, efforts are needed to gather comprehensive data and analyze it to provide valuable insights for policymakers in developing appropriate strategies to enhance access and equity in immunization for all individuals in Indonesia. With these steps, it is hoped that the overall immunization system in Indonesia can be strengthened, ensuring that no one is left behind in basic health protection.

## **2. Analytical Framework**

This article employs a combined analytical framework encompassing international relations, gender, and health to understand the complexities of global health issues. The International Relations Framework, developed by John W. Sewell and Helen M. Kinsella (1998), focuses on analysis within the context of globalization and interdependence, illustrating how countries rely on each other to face global challenges. This framework is integrated with the Gender Analysis Framework by Chandra Talpade Mohanty (1988), which emphasizes the importance of considering gender influences in global welfare. By merging these perspectives, this article explores how international interactions and gender roles contribute to global dynamics.

Additionally, this article leverages health analysis frameworks from the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) to assess global and public health strategies, particularly in the context of vaccination. The WHO framework provides insights into global health aspects and effective vaccination strategies, while the CDC framework highlights the importance of public health approaches in vaccination programs. Furthermore, Patricia Hill Collins' (1990) Intersectional Analysis Framework enriches the analysis by considering the impact of gender, class, race, and ethnicity on welfare. Finally, B. Guy Peters' (1993) Policy Analysis Framework complements this article with a policy perspective in both

global and national contexts, enabling a comprehensive understanding of effective policy interventions in addressing health and welfare issues.

### **3. Research Method**

The study on the global and Indonesian landscape concerning child vaccination, immunization, and gender dynamics involves a comprehensive literature review approach. This study examines various sources, including international frameworks, government policies, and scientific research, to explore the intersectionality of gender and immunization in Indonesia. Through the synthesis of existing literature, this research aims to identify various challenges and opportunities in achieving vaccination goals and ensuring equitable access to immunization services. This methodology also includes the analysis of data from international and national sources to understand the current landscape of immunization programs and gender disparities in vaccination uptake. Findings from this research will contribute to informing evidence-based strategies and policies aimed at improving vaccination coverage and addressing gender inequality in healthcare access.

### **4. Results and Discussions**

This study reveals that international frameworks such as the CDC Global Immunization Framework 2021-2030 and the WHO Immunization Agenda 2030 have been highly effective in improving global immunization access and equity. The implementation of these frameworks has successfully reduced morbidity and mortality from vaccine-preventable diseases. Furthermore, collaboration among WHO, UNICEF, and Gavi has helped overcome logistical and funding challenges, ensuring that immunization programs can be sustained and achieve broader coverage.

In Indonesia, surveys indicate that immunization coverage remains below the expected targets. According to the Indonesia Basic Health Survey (2018), only 58% of children aged 12-23 months receive complete immunization. Research identifies factors such as vaccine hesitancy, religious considerations, and limited access as major barriers. Efforts to improve immunization coverage include the launch of the Behavioral and Social Drivers of Vaccination (BeSD) study, aimed at identifying and addressing these barriers.

Based on the above description, empowering women to enhance access and equity in immunization services is crucial. Women's involvement in healthcare services and family health decision-making has proven beneficial for increasing childhood immunization coverage. Additionally, initiatives to address negative perceptions about vaccines, including religious concerns and vaccine safety, as well as improving access to quality healthcare services, are essential to raising awareness and compliance with immunization schedules.

#### **4.1. International Immunization and Vaccination Framework**

The International Immunization and Vaccination Framework is a comprehensive strategy aimed at reducing morbidity and mortality from vaccine-preventable diseases. This framework involves monitoring and assessing the impact of strategies and activities to control vaccine-preventable diseases, collecting, analyzing, and interpreting surveillance data, and supporting the work of other technical units within the Immunization, Vaccines, and Biologicals Department (IVB) at the World Health Organization (WHO, 2024).

The Centers for Disease Control and Prevention (CDC) has developed the Global Immunization Strategic Framework 2021-2030, which is a significant milestone in global efforts to improve access and equity in immunization. Through this framework, the CDC sets meaningful goals, such as preventing disease transmission, detecting outbreaks rapidly, responding

effectively to emergencies, maintaining sustainable immunization programs, and innovating to accelerate the availability and dissemination of new vaccines and diagnostics (Centers for Disease Control and Prevention, 2021). Thus, initiatives like the Global Immunization Strategic Framework provide a solid foundation for international efforts in addressing global health challenges while providing clear guidance for policymakers and healthcare practitioners in promoting holistic and inclusive public health.

The World Health Organization (WHO) reaffirms its commitment through the Immunization Agenda 2030, an ambitious initiative aimed at ensuring that no one is left behind in immunization efforts. By strengthening the global immunization system, WHO focuses not only on vaccine delivery but also on broader public health aspects. On the other hand, Gavi, the Vaccine Alliance, with its 2021-2025 Strategy, directs efforts towards transitioning to self-sustaining immunization programs. This is not just about providing vaccines but also empowering countries to manage these programs effectively at the local level. Meanwhile, UNICEF has formulated the Immunization Roadmap 2018-2030, a clear guide to its role in supporting countries to strengthen their immunization systems. Considering logistics, funding, and community education, UNICEF strives to ensure that every country has access to the necessary resources and knowledge to achieve optimal immunization coverage. With the complementary strengths and focus of WHO, Gavi, and UNICEF, these initiatives provide a robust foundation for improving access and effectiveness of immunization globally, ensuring that public health protection is no longer a privilege but a fundamental right for all individuals.

The Full-Value Vaccination Assessment Framework (FVVA) is not just a conceptual approach but also a solid foundation for the development and implementation of effective vaccination policies. FVVA presents organizing principles that are not only coherent but also prioritize autonomy and stakeholder agency throughout the process. Thus, FVVA is not just a set of guidelines but a guide that embodies core values in vaccination decision-making. Its existence helps create alignment among key stakeholders, enabling them to collaborate effectively in policy formulation, procurement management, and vaccine introduction, especially in low- and middle-income countries (LMICs). By providing a clear and structured framework, FVVA becomes a valuable tool in ensuring that vaccination decisions are based on comprehensive considerations and account for specific needs and local contexts. Thus, FVVA not only creates a strong foundation for vaccination efforts but also serves as a crucial milestone in the journey towards more equitable and effective vaccine access worldwide.

Global immunization efforts are driven by comprehensive frameworks such as the WHO Immunization and Vaccination Framework, which emphasizes the importance of monitoring, assessment, and supportive strategies for controlling vaccine-preventable diseases. Similarly, the Centers for Disease Control and Prevention (CDC) have outlined the Global Immunization Strategic Framework 2021-2030, focusing on goals such as disease prevention, outbreak detection, and sustainable immunization programs. Additionally, initiatives like the WHO Immunization Agenda 2030, Gavi Strategy 2021-2025, and UNICEF Immunization Roadmap 2018-2030 further underscore the commitment to achieving universal immunization coverage. Moreover, the Full-Value Vaccination Assessment Framework provides a structured approach to decision-making, especially in low- and middle-income countries, aiming to ensure equitable access to vaccines. Collectively, these frameworks reflect collaborative efforts to leave no one behind in pursuing improved global health through vaccination, emphasizing equality, accessibility, and sustainability as fundamental principles.

#### 4.2. International Assistance and Support for Indonesia

International assistance for child vaccination, immunization, and gender support in Indonesia is a primary focus for many organizations such as WHO, UNICEF, and other global health institutions. However, the need to enhance immunization coverage post-COVID-19 pandemic has come under scrutiny. Insufficient immunization coverage can pose serious health threats, demanding prompt and appropriate responses. Stronger international commitments are needed to ensure adequate resources and inclusive strategies to achieve health access equality for all individuals, regardless of their gender or socioeconomic background. According to the Indonesian Basic Health Survey (2018), data shows that only 58% of children aged 12-23 months received complete immunization, a figure far below the national coverage target set by the World Health Organization (WHO) of 93%. (World Health Organization, 2022). This figure depicts a significant gap between actual immunization achievements and desired standards, reflecting serious challenges in efforts to improve public health in Indonesia.

Various complex factors influence the rate of child immunization in Indonesia, including vaccine safety and efficacy concerns, religious considerations involving several community groups, as well as practical issues such as limited access and trust in information sources. (Jusril et al., 2024). These doubts can lead to delays or refusals of immunization, increasing the risk of preventable disease transmission and causing negative impacts on public health as a whole. Therefore, it is important to adopt a holistic and sustainable approach to improve immunization coverage, including accurate and evidence-based education about the benefits of vaccines, open dialogue with religious groups, and efforts to enhance access and availability of immunization services across Indonesia. Through these measures, it is hoped that compliance with immunization schedules will be improved, vulnerability to preventable diseases will be reduced, and the health of children and communities as a whole will be enhanced.

WHO has set ambitious global goals to achieve high immunization coverage, namely 90% for children under one-year-old and 80% in each district/city by 2020. Although Indonesia has made significant progress, data indicates that there are still significant challenges in achieving these targets. According to research by Faidah (2017), in 2015, complete primary immunization coverage in infants reached 86.9% but still fell below the target set at 91%. Furthermore, even in 2016, although coverage increased to 91.6%, it was still slightly below the set target of 91.5%. More worrisome, nearly one million Indonesian children did not receive complete immunization in 2015, reflecting significant coverage gaps and increased risks of preventable diseases.

The COVID-19 pandemic has not only been a profound global health crisis but has also had worrying impacts on child immunization programs in Indonesia. Data from the World Health Organization (2022) shows that more than 3.7 million children missed vaccinations in 2020 compared to the previous year, underscoring the significant impact of this pandemic on immunization coverage. However, the challenges faced are much more complex than just these numbers. Vaccine hesitancy, religious concerns, as well as practical issues such as access and trust in information sources have been identified as major barriers to improving immunization coverage in Indonesia (Jusril et al., 2024). Uncertainty and fear related to vaccine safety and efficacy have permeated communities, causing a decline in vaccine acceptance rates. Additionally, cultural and religious factors also play a significant role in determining attitudes towards immunization, complicating efforts to raise awareness and participation in immunization programs. Furthermore, practical challenges such as access to healthcare services and trust in verified health information also affect the effectiveness of immunization programs.

To address the complex challenges of improving vaccination coverage in Indonesia, international aid organizations such as the World Health Organization (WHO), UNICEF, and various other institutions have been actively taking concrete steps. They are not only focused on



improving vaccine accessibility but also strive to reduce barriers that hinder effective distribution. Additionally, they have been promoting vaccination as a social norm, making it an integral part of public awareness of the importance of health protection. Meanwhile, the Indonesian government itself has also responded seriously to these challenges. Measures such as the formation of a national team to expedite the development of COVID-19 vaccines demonstrate the government's commitment to proactively addressing this crisis. Furthermore, by signing memoranda of understanding with UNICEF and WHO for the procurement of vaccines at affordable prices, the Indonesian government reaffirms its commitment to ensuring fair and equitable access to vaccines for the entire population.

Previous research has yielded varied evidence regarding gender gaps in immunization coverage. Some studies indicate that boys are more likely to be vaccinated in certain contexts, while others show the opposite trend, with girls more likely to receive vaccines (Siramaneerat et al., 2024). However, despite these diverse findings, further research is needed to thoroughly understand the gender impact on immunization coverage in Indonesia.

International assistance in terms of child vaccination, immunization, and gender support in Indonesia is not only important but also urgent to address the significant gaps in vaccination coverage and ensure that every child has full access to life-saving vaccines. Sustainable efforts by organizations such as WHO, UNICEF, and the Indonesian government are crucial in efforts to improve vaccination coverage and address emerging challenges, such as vaccine hesitancy, religious concerns, and practical issues related to access and trust in information sources.

Based on the above description, a substantial focus of international aid organizations such as the World Health Organization (WHO) and UNICEF is on child vaccination, immunization, and gender support in Indonesia. Despite efforts, the country faces challenges in achieving adequate immunization coverage, exacerbated by factors such as vaccine hesitancy and the impact of the COVID-19 pandemic. Although Indonesia has made progress in immunization coverage, significant gaps remain, with millions of children still unvaccinated or incompletely immunized. The COVID-19 pandemic further presses vaccination efforts, leading to a significant increase in the number of children missing vaccinations. To address these challenges, joint efforts by international aid organizations and the Indonesian government are crucial, with a focus on increasing access, reducing barriers, and promoting vaccination as a social norm.

#### **4.3. Government Programs and Policies in Indonesia Related to Vaccines and Immunization**

The Indonesian government has implemented various programs and policies to improve vaccination coverage and address gender inequality. The Expanded Program on Immunization (EPI), initiated by the World Health Organization (WHO) in 1974, aims to provide universal immunization for all children. Despite the commitment to achieving universal basic immunization coverage for infants and children, Indonesia faces challenges in maintaining high vaccination rates. In 2018, the Indonesian Basic Health Survey reported that only 58% of children aged 12-23 months were fully immunized, far below the national coverage target of 93% (Wirawan et al., 2022).

To address vaccination gaps, the Indonesian government has launched initiatives such as the Behavioral and Social Drivers of Vaccination (BeSD) study, which aims to identify beliefs, social norms, and practical barriers to vaccine uptake (Jusril et al., 2024). Additionally, the government has focused on improving access and reducing stockouts, as well as promoting vaccination as a social norm (Faturohman et al., 2021).

Gender perspective, the Indonesian government has recognized the importance of empowering women in accessing health services. Research has shown that empowering women facilitates the use of maternal health services, which in turn benefits the health of their children.

However, further research is needed on the role of women's empowerment in child immunization in Indonesia, as previous studies have identified education and wealth as key determinants of immunization coverage in children (Sebayang et al., 2022).

To improve vaccination coverage and address gender gaps, the Indonesian government could consider long-term investments in enhancing parental education and improving the quality of services received by mothers during antenatal care (ANC) and postpartum delivery (Wirawan et al., 2022). Additionally, efforts should be made to address negative perceptions about vaccines, including concerns about their "halal-haram" status, and to increase public awareness of the importance of vaccination (Faturrohman et al., 2021).

The Indonesian government has endeavored to improve vaccination coverage and address gender inequality through various programs and policies. Despite the establishment of initiatives such as the Expanded Program on Immunization (EPI), aimed at achieving universal immunization for children, Indonesia continues to struggle to maintain high vaccination rates, as evidenced by the significant gap between actual coverage and national targets. To combat vaccination gaps, the government has launched initiatives such as the Behavioral and Social Drivers of Vaccination (BeSD) study, which focuses on identifying barriers to vaccine uptake. Additionally, efforts have been made to improve access, reduce stockouts, and promote vaccination as a social norm. Recognizing the importance of empowering women in accessing health services, the government aims to leverage this to increase the use of maternal health services and, consequently, improve child immunization rates.

Ultimately, sustained investments in parental education and the quality of health services, coupled with public awareness campaigns addressing vaccine issues, are crucial to achieving optimal vaccination coverage and gender equality in Indonesia. The Indonesian government has implemented various programs and policies to improve vaccination coverage and address gender inequality. However, there is still a need for further research on the role of women's empowerment in child immunization and for targeted interventions to address specific barriers to vaccine uptake.

#### **4.4. Indonesia's Gender Health Service System**

The Indonesian healthcare system for child vaccination and immunization has made significant progress in recent years, with the Ministry of Health updating the Practical Guidelines for Immunization Management at Community Health Centers (Puskesmas) in 2023 to address challenges such as uneven immunization coverage and limited healthcare workforce capacity. This updated guidance includes home-to-home monitoring tools with considerations for gender, equality, and new human rights, allowing vaccinators to gather information on father involvement, disability inclusion, and children living in hard-to-reach areas (Chu & Rammohan, 2022).

Gender inequality greatly affects access to healthcare services, including immunization, and influences vaccination rates. In Indonesia, women are the dominant providers of vaccination services, but children from households headed by women and single mothers are more likely to be unvaccinated and drop out of school compared to children from households with single fathers. Mobility issues, such as long distances to healthcare facilities and poor transportation, can also be exacerbated by cultural expectations and gender norms that limit women's autonomy in public, thus restricting women's mobility (Suwantika et al, 2023).

To address these challenges, the Indonesian government and WHO have sought to empower healthcare workers, enhance immunization planning, delivery, and monitoring skills, and promote equitable immunization coverage across provinces, districts, sub-districts, and villages. The updated guidelines include new tools for home-to-home monitoring with considerations for



gender, equality, and new human rights, allowing vaccinators to gather information on father involvement, disability inclusion, and children living in hard-to-reach areas (Chu & Rammohan 2022).

Based on the above presentation, there has been progress achieved in the Indonesian healthcare system for child vaccination and immunization, highlighting the efforts of the Ministry of Health to update the Practical Guidelines for Immunization Management at Community Health Centers (Puskesmas) in 2023. This update addresses challenges such as uneven immunization coverage and limited healthcare workforce capacity by incorporating new tools with considerations for gender, equality, and human rights.

Despite these improvements, gender inequality continues to affect access to healthcare services, including immunization, with women primarily serving as vaccinators but children from households headed by women facing higher rates of being unvaccinated. Mobility concerns further exacerbate this gap, especially due to cultural expectations and gender norms that limit women's independent movement. To address these challenges, the Indonesian government and WHO have focused on empowering healthcare workers, improving immunization planning and delivery, and promoting equitable coverage at all levels.

#### **4.5. Challenges Faced by Women in Accessing Vaccination and Immunization Services**

Double burdens faced by women in achieving vaccination, immunization, and gender equality goals are complex and urgent issues. They involve various factors, including not only differences in immune response based on gender but also vaccine hesitancy and unpaid caregiving burdens. The World Health Organization (WHO) SAGE has highlighted the need for vaccine developers and funders to prioritize the assessment of vaccine safety and immunogenicity for pregnant and lactating women in clinical development stages and post-marketing surveillance plans (Heidari & Goodman, 2021).

The COVID-19 pandemic has underscored the importance of gender roles and gender in shaping infection risks, susceptibility to diseases, and experiences of poor health (Heidari & Goodman, 2021). School closures and pandemic measures have impacted unpaid caregiving burdens and women's workforce participation, hindering their access to vaccines and other essential services (United Nations International Institute for Global Health, 2021). The delivery and administration of COVID-19 vaccines heavily rely on women's workforce, both paid and unpaid, thus placing additional pressure on their economic and personal security (Harman et al., 2020).

To address the complex challenges in vaccine distribution, it is crucial to strengthen approaches that consider intersectional dimensions in vaccine prioritization strategies. This demands ensuring access that is not only inclusive but also non-discriminatory and equitable to vaccines for the entire population. As highlighted by the United Nations International Institute for Global Health (2021), these efforts should accommodate specific needs such as addressing gender power inequalities, stigma, and discrimination. Moreover, active collaboration with communities and civil society groups is key to effective vaccine dissemination. Vaccine delivery strategies need to be designed in a way that effectively reaches various population segments, including women, men, and individuals with diverse gender identities, while addressing specific barriers that may arise such as gender-related factors and other factors affecting vaccine accessibility and acceptance.

Based on the above exposition, there are several challenges faced by women in achieving the goals of child vaccination, immunization, and gender equality, encompassing issues such as differences in immune response based on gender, vaccine hesitancy, and unpaid caregiving burdens. The COVID-19 pandemic further emphasizes the need to consider gender and gender

in vaccination strategies, given the disproportionate impacts on women's unpaid caregiving responsibilities and workforce participation.

#### **4.6. Negative Masculine Norms Hindering Immunization and Vaccination**

Negative masculine norms can hinder immunization and vaccination for children, as these norms may make men reluctant to seek healthcare, encourage risk-taking behavior, and contribute to vaccine hesitancy. The vaccine decision-making process for men can be influenced by masculine norms prioritizing independence, which can lead to a lower likelihood of seeking healthcare and an increased likelihood of engaging in risky behavior. This can result in reluctance to vaccinate themselves and their children, as vaccination may be perceived as a sign of vulnerability or weakness.

Gender and racial intersections in older adults' vaccine decision-making have also been studied, with evidence suggesting that men's vaccine decision-making process may be influenced by masculine norms that emphasize independence, leading to a lower likelihood of seeking healthcare and an increased likelihood of engaging in risky behavior. In addition, there are gender differences in risk perception, with women and men perceiving the same risks differently or perceiving different risks altogether.

During the COVID-19 pandemic, surveyed women in the US perceived greater disease risk, while men perceived greater financial hardship risk (i.e., job loss or income decrease). In the case of vaccination, gender differences in risk perception are exacerbated, as vaccine acceptance can be influenced by perceived risks associated with the disease prevented by the vaccine and perceived risks associated with the vaccine itself (i.e., side effects).

Disrupted services, misinformation storms, and eroded trust in vaccines during the COVID-19 pandemic also contribute to vaccine hesitancy. This pandemic is accompanied by an "infodemic," an epidemic of misinformation, which has led to a doubling of critical vaccine content online compared to pre-COVID-19 periods. This misinformation can further reinforce negative masculine norms that hinder vaccination.

Negative masculine norms can hinder immunization and vaccination for children by impeding men's healthcare-seeking behavior, promoting risk-taking behavior, and contributing to vaccine hesitancy. These norms must be addressed through targeted communication strategies and interventions that recognize the complexity of vaccine hesitancy and the role of social norms in vaccine decision-making.

Based on the above exposition, the impact of negative masculine norms on child immunization and vaccination highlights how these norms hinder healthcare-seeking behavior in men, promote risk-taking behavior, and contribute to vaccine hesitancy. The vaccine decision-making process of men is influenced by norms that prioritize independence and autonomy, resulting in a reluctance to seek healthcare and vaccinate themselves and their children. Additionally, gender and racial intersections affect vaccine decision-making in older adults, with masculine norms exacerbating disparities in healthcare access and risk perception. Amid the COVID-19 pandemic, gender differences in risk perception have emerged, further complicating vaccine acceptance. The proliferation of misinformation during the pandemic has exacerbated vaccine hesitancy, reinforcing negative masculine norms.

#### **4.7. Hoaxes and Disinformation Regarding Immunization and Vaccination**

An analysis of hoaxes and disinformation regarding immunization and vaccination for children shows significant misinformation issues that can influence public opinion and behavior regarding vaccines. These sources provide insights into the nature and prevalence of vaccine misinformation, particularly during the COVID-19 pandemic.

A study by Priastuty et al. (2020) explains that hoaxes about COVID-19 vaccines often take the form of misleading or misinterpreted content, which can steer public opinion in different directions. Misleading headlines include false claims about vaccines containing microchips, price discrepancies, and unfounded safety concerns about vaccines. These hoaxes can be disseminated through easily accessible social media and can be shared by a wide audience (Lee, Sun Kyong, et al., 2022).

Researchers have identified a group of 12 individuals, known as the "Disinformation Dozen," who are responsible for a significant portion of misleading claims and outright lies about COVID-19 vaccines on social media platforms. These individuals often promote fake treatments, denounce vaccines, and vilify doctors, and their messages can significantly impact vaccine hesitancy and willingness to vaccinate. The anti-vaccine movement has used misinformation, including conspiracy theories, to spread false beliefs about vaccines. Even after misinformation is corrected, false beliefs persist and are difficult to change. The public's vulnerability to misinformation may depend on factors such as congruence with existing information, source credibility, political beliefs, and ease of accessing information.

To combat the spread of misinformation about vaccines, it is important to promote media literacy and critical thinking skills among the public. This can help people differentiate between accurate and misleading information and make informed decisions about vaccines. Additionally, efforts should be made to identify and remove false claims from social media platforms to reduce the spread of vaccine hoaxes (Lee et al., 2022; Skafle et al, 2022).

Examining hoaxes and disinformation about child immunization and vaccination highlights misinformation issues that can influence public opinion and behavior regarding vaccines, particularly evident during the COVID-19 pandemic. The studies outlined above reveal the prevalence of misleading claims and outright lies about vaccines, often disseminated through social media platforms. Identified individuals like the "Disinformation Dozen" play a significant role in spreading false information, contributing to vaccine hesitancy.

#### **4.8. Cultural, Economic, and Social Challenges for Indonesian Women in Achieving International Goals**

In Indonesia, the success of immunization programs is hindered by the complex interaction of cultural, economic, social, and gender challenges. Strongly rooted cultural norms on traditional gender roles and patriarchal customs often dictate that mothers bear the primary responsibility for childcare, including taking their children to health centers for immunization. These societal expectations can create barriers for fathers, who may feel ashamed if unable to fulfill this role, resulting in delayed child immunizations (Chu & Rammohan, 2023). Additionally, economic challenges exacerbate the situation, as low levels of education and income contribute to vaccine hesitancy and incomplete immunization coverage. Studies have consistently shown that education and wealth are important determinants of immunization uptake among children.

Furthermore, social factors further complicate the landscape of immunization-seeking behavior, especially in remote areas where access to healthcare facilities is limited. Influences from community leaders and neighbors, coupled with the lack of electricity infrastructure and transportation, present significant barriers to reaching health centers for vaccination services (Chu & Rammohan, 2023). Additionally, gender disparities in access to healthcare persist, with women's empowerment emerging as a critical determinant of healthcare utilization for women and their children. Women's empowerment has been shown to facilitate the utilization of maternal healthcare services, including immunization uptake.

To effectively address these challenges, an interdisciplinary approach is crucial. This requires empowering fathers to play an active role in seeking healthcare and immunization for their

children, breaking down barriers to accessing vaccination services in remote areas, and integrating diverse perspectives into Indonesian health policies. By adopting a holistic approach that considers the complex interactions between cultural, economic, social, and gender factors, Indonesia can enhance the effectiveness of immunization programs and ensure equitable access to vaccination services for all children (Chu & Rammohan, 2023; UNICEF, 2022).

In Indonesia, immunization programs face significant challenges rooted in cultural, economic, social, and gender factors. Traditional gender roles often burden mothers with the primary responsibility for childcare and immunization, while fathers may face social pressure and shame if unable to participate, resulting in delayed immunizations. Economic barriers, such as low education and income levels, contribute to vaccine hesitancy, while social factors such as community influence and accessibility in remote areas further hinder vaccination efforts. Gender disparities persist, underscoring the importance of women's empowerment in promoting access to healthcare, including immunization.

#### 4.9. Synthesis

The international immunization and vaccination framework developed by the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), and other organizations such as Gavi and UNICEF, is a comprehensive strategy designed to reduce morbidity and mortality from vaccine-preventable diseases. Through initiatives like the Immunization Agenda 2030, WHO is committed to ensuring that no individual is left behind in immunization efforts, strengthening global immunization systems not only in terms of vaccine delivery but also through broader public health approaches. Gavi's 2021-2025 strategy directs efforts towards self-sustaining immunization programs, while UNICEF's Immunization Roadmap 2018-2030 focuses on logistics, funding, and community education, ensuring that every country has access to the resources and knowledge needed to achieve optimal immunization coverage.

Global immunization efforts are further reinforced by the CDC's Global Immunization Strategic Framework 2021-2030, which sets significant goals such as preventing disease transmission, rapidly detecting outbreaks, and effectively responding to emergencies. This framework provides a solid foundation for international efforts in addressing global health challenges, providing clear guidance for policymakers and healthcare practitioners to maintain holistic and inclusive public health. The Full-Value Vaccine Assessment (FVVA) framework adds an important dimension to vaccine decision-making, focusing on stakeholder autonomy and agency while considering special needs and local contexts.

However, despite these comprehensive frameworks providing a strong foundation for global immunization programs, significant challenges remain, especially in low- and middle-income countries (LMICs). In Indonesia, for example, data shows that immunization coverage for children aged 12-23 months is still far below the national targets set by WHO. Various factors such as vaccine hesitancy, religious considerations, and limited access to healthcare services are major barriers to achieving optimal immunization coverage. The COVID-19 pandemic has exacerbated this situation by causing significant disruptions to routine immunization programs, resulting in millions of children missing necessary vaccinations.

Efforts to address these challenges require stronger commitment from the international community and national governments. In Indonesia, the government has launched various initiatives such as the Behavioral and Social Drivers of Vaccination (BeSD) study to identify practical barriers and social norms affecting vaccine uptake. The government also focuses on improving access, reducing reliance on international supplies, and promoting vaccination as a social norm. Support from international organizations such as WHO and UNICEF is crucial in providing technical assistance and funding to support these initiatives.

Furthermore, gender inequality in access to healthcare, including immunization, is also a serious issue that needs attention. Research shows that women's empowerment can increase the utilization of maternal and child healthcare services, which in turn can improve immunization coverage. Therefore, programs supporting women's empowerment and enhancing parental education are crucial for achieving better immunization coverage. Efforts to address negative masculine norms that hinder vaccination are also needed, with targeted communication strategies to change perceptions and increase male participation in immunization efforts.

Hoaxes and misinformation related to vaccination are another significant challenge, especially in the current digital era where information can easily spread widely through social media. Misinformation about the safety and efficacy of vaccines can reduce public trust in immunization programs. Therefore, intensive efforts are needed to improve public health literacy and provide accurate, evidence-based information about the benefits of vaccines. Awareness campaigns involving community leaders and influencers can help address misinformation and increase vaccine acceptance among the public.

Overall, this comprehensive international immunization and vaccination framework provides a strong foundation for global efforts to address vaccine-preventable diseases. However, the success of its implementation relies heavily on close cooperation between governments, international organizations, and communities. Sustainable efforts to address practical, social, and cultural challenges, as well as to improve access and equity in immunization, are key to achieving better global health outcomes and protecting populations from vaccine-preventable diseases.

## 5. Conclusion

In the context of global efforts to reduce morbidity and mortality from vaccine-preventable diseases, the international immunization framework provides a solid foundation. Initiatives such as the CDC Global Immunization Strategic Framework 2021-2030 and the WHO Immunization Agenda 2030 provide clear direction in addressing global health challenges. However, at the national level, Indonesia still faces various challenges in improving immunization coverage, especially in addressing vaccine hesitancy and the impact of the COVID-19 pandemic.

While there have been advancements in Indonesia's healthcare system, particularly regarding child vaccination and immunization, gender inequality remains a significant barrier. Negative masculine norms also hinder immunization and vaccination efforts, while hoaxes and misinformation complicate the situation by influencing public opinions and behaviors related to vaccines. These challenges require an interdisciplinary approach involving all stakeholders, including empowering fathers to seek healthcare and immunization services for their children. Breaking down barriers to access vaccination services in remote areas and ensuring the integration of diverse perspectives in health policies are crucial steps.

Some recommendations to improve vaccination in Indonesia include: First, gathering and analyzing data to understand gender factors in immunization. Second, developing gender-responsive policies that address barriers for women and girls. Third, combating misinformation through media literacy campaigns and collaboration with social media platforms. Fourth, strengthening the healthcare system to improve infrastructure and the capacity of healthcare workers. Fifth, promoting community engagement to increase awareness and address cultural barriers. Lastly, empowering women and fathers in healthcare decision-making and child immunization.



## References

- Bliss, K. (2024, 20 April). Gender dan Imunisasi dalam Lanskap Covid-19. *Agenda Imunisasi 2030 (IA2030)*. Diperoleh Dari (<https://www.csis.org/analysis/gender-and-immunizations-within-covid-19-landscape>)
- Burke, M., & Speer, M. D. (2024). Kesetaraan Gender untuk Meningkatkan Pelayanan Imunisasi. Pusat Studi Strategis dan Internasional. Diperoleh Dari (<https://www.csis.org/analysis/gender-equity-improve-immunization-services>)
- Pusat Pengendalian dan Pencegahan Penyakit. (2021). Kerangka Kerja Strategis Imunisasi Global CDC 2021-2030. Diperoleh Dari (<https://www.cdc.gov/globalhealth/immunization/docs/global-immunization-framework-2021-2030-508.pdf>)
- Centers for Disease Control and Prevention. (n.d.). *Vaccination strategies*. Retrieved from <https://www.cdc.gov>
- Chu, H., & Rammohan, A. (2022). Imunisasi anak dan vaksinasi sesuai usia di Indonesia. *Kesehatan Masyarakat BMC*, 22(1). (<https://doi.org/10.1186/s12889-022-14408-x>)
- Chu, H., & Rammohan, A. (2023). Imunisasi anak dan vaksinasi sesuai usia di Indonesia. *Kesehatan Masyarakat BMC*, 22, 2023. (<https://doi.org/10.1186/s12889-022-14408-x>)
- Collins, P. H. (1990). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment*. Routledge.
- DeRoeck, B., dkk. (2024). Faktor-faktor yang mempengaruhi prioritas vaksin oleh pembuat kebijakan di negara berpenghasilan rendah dan menengah: tinjauan pelingkupan. *Kebijakan dan Perencanaan Kesehatan*, 38 (3), 363-380. (<https://academic.oup.com/heapol/article/38/3/363/6783008>)
- Faturohman, T., Kengsiswoyo, G. A., Harapan, H., dkk. (2021). Faktor-faktor yang mempengaruhi penerimaan vaksin COVID-19 di Indonesia: Adopsi Model Penerimaan Teknologi (TAM). *f1000 penelitian*, 10, 476. (<https://doi.org/10.12688/f1000research.24960.1>)
- Harman, S., dkk. (2020). Vaksin COVID-19 dan keamanan wanita. *Perpustakaan Kedokteran Nasional*, 357-358.
- Heidari-S., dkk. (2024). Saatnya bertindak: menuju pendekatan gender titik-temu untuk pengembangan dan penyebaran vaksin COVID-19 yang tidak meninggalkan siapa pun. *Kesehatan Global BMJ*, 6(8), e006854. (<https://doi.org/10.1136/bmjgh-2024-000685>)
- Heidari, S., & Goodman, T. (2021). Pertimbangan kritis jenis kelamin dan gender Untuk Penelitian, Pengembangan, dan Pengiriman Vaksin Covid-19 yang Adil. Organisasi Kesehatan Dunia. ([https://cdn.who.int/media/docs/default-source/immunization/sage/covid/gender-covid-19-vaccines-sage-background-paper.pdf?download=true&sfvrsn=899e8fca\\_15](https://cdn.who.int/media/docs/default-source/immunization/sage/covid/gender-covid-19-vaccines-sage-background-paper.pdf?download=true&sfvrsn=899e8fca_15))
- Jusril, H., dkk. (2024). Faktor-faktor yang mempengaruhi permintaan vaksinasi di Indonesia: analisis sekunder dan penilaian nasional multimetode. *Jurnal Vaksin dan Imunoterapi*, 3(1), 1-20. (<https://doi.org/10.1007/s42400-024-00024-9>)
- Lee, S. K., dkk. (2022). Informasi yang salah tentang vaksin COVID-19 dan keragu-raguan vaksin. *Perpustakaan Kedokteran Nasional*. (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9366757/>)
- McKune, S., dkk. (2024). Mempelajari sistem vaksin responsif gender: analisis retrospektif metode terbaik. *Perbatasan dalam Sistem Pangan Berkelanjutan*, 1-15. (<https://doi.org/10.3389/fsufs.2023.1176101>)
- Mohanty, C. T. (1988). Under Western eyes: Feminist scholarship and colonial discourses. *Feminist Review*, 30, 61-88.



- Peterson, L. M., Orr, J. A., Rogelberg, S. D., & Olsen, N. (2022). Faktor kontekstual sosial berinteraksi dengan maskulinitas untuk memengaruhi niat vaksinasi HPV pria perguruan tinggi: Peran norma deskriptif, prototipe, dan jenis kelamin dokter. *Jurnal Kedokteran Perilaku*, 45(6), 825-840. (<https://doi.org/10.1007/s10865-022-00350-1>)
- ReliefWeb. (n. d.). Leave no child behind: Melindungi masa depan anak Indonesia melalui imunisasi. Diperoleh Dari (<https://reliefweb.int/report/indonesia/leave-no-child-behind-protecting-future-indonesian-children-through-immunization>)
- Sewell, J. W., & Kinsella, H. M. (1998). *Multilateralism in the post-Cold War era*. Brookings Institution Press.
- Shapiro, J. R., Privor-Dumm, L., Rosser, E. N., Leng, S. X., Klein, S. L., & Morgan, R. (2022). Persimpangan gender dan ras dalam keputusan orang dewasa yang lebih tua untuk menerima vaksin COVID-19. *Vaksin*, 41(1), 211-218. (<https://doi.org/10.1016/j.vaccine.2022.09.043>)
- Suwantika, A. A., Zakiyah, N., Abdulah, R., & Diantini, A. (2023). Penilaian layanan imunisasi anak di fasilitas kesehatan swasta di Indonesia: studi kasus di kota berpenduduk padat. *Perbatasan dalam Kesehatan Masyarakat*, 11, 1093387. (<https://doi.org/10.3389/fpubh.2023.1093387>)
- Skafle, I., Nordahl-Hansen, A., Quintana, D. S., Wynn, R., & Gabarron, E. (2022). Informasi yang Salah Tentang Vaksin COVID-19 di Media Sosial: Tinjauan Cepat. *Jurnal Riset Internet Medis*, 24(8), e37367. (<https://doi.org/10.2196/37367>)
- Penulis (s). (2019). Informasi yang salah tentang vaksin dan media sosial. *Kesehatan Digital Lancet*, 1(6), E258-E259.
- Peters, B. G. (1993). *American public policy: Promise and performance*. Chatham House Publishers.
- Full-Value Vaccine Assessment (FVVA): kerangka kerja untuk menilai dan mengkomunikasikan nilai vaksin untuk investasi dan pengambilan keputusan pengenalan. Diperoleh dari (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10318807/>)
- Institut Internasional Kesehatan Global Universitas Perserikatan Bangsa-Bangsa. (2021). Catatan panduan dan daftar periksa untuk mengatasi hambatan terkait gender dalam penerapan vaksin COVID-19 yang adil. Diakses tanggal March 9, 2021, dari (<https://www.unwomen.org/sites/default/files/2021-11/Guidance-note-and-checklist-for-tackling-gender-related-barriers-to-equitable-COVID-19-vaccine-deployment-en.pdf>)
- UNICEF. (2022, 28 Februari). Indonesia menargetkan wilayah vaksinasi rendah untuk mengatasi penurunan imunisasi anak. UNICEF. (<https://www.unicef.org/indonesia/press-releases/indonesia-targets-low-vaccination-areas-tackle-decline-childhood-immunization>)
- UNICEF. (n. d.). Imunisasi. UNICEF Indonesia. Diperoleh dari (<https://www.unicef.org/indonesia/topics/immunization>)
- Organisasi Kesehatan Dunia. (2024, 30 Maret). Dunia Imunisasi: Pencapaian, Tantangan, dan Visi Strategis untuk Dekade Berikutnya. Diperoleh dari (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8482029/>)
- Organisasi Kesehatan Dunia. (2024). Unit Analisis dan Wawasan Imunisasi. Diperoleh Dari (<https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/surveillance>)
- Organisasi Kesehatan Dunia. (2024). Nilai Vaksin. Diperoleh Dari (<https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/vaccine-impact-value>)
- World Health Organization. (n.d.). *Global vaccine action plan*. Retrieved from <https://www.who.int>

- Wirawan, G. B. S., dkk. (2022). Pemberdayaan Perempuan Memfasilitasi Imunisasi Lengkap pada Anak-anak Indonesia: Sebuah Studi Cross-sectional. *J Prev Med Kesehatan Masyarakat*, 55(2), 193-204.
- Wirawan, G. B. S., dkk. (2022). Faktor-faktor yang mempengaruhi imunisasi anak di Indonesia. Diakses tanggal 20 April 2024, dari (<https://www.who.int/indonesia/news/detail/13-02-2022-factors-affecting-childhood-immunization-in-indonesia>)