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INDONESIA'S PROGRESS REPORT ON SOCIAL DETERMINANTS OF HEALTH ACTIONS

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Indonesia's Progress Report on Social Determinants of Health Actions

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EXECUTIVE SUMMARY

In 2011, the World Health Organization (WHO) introduced the concept of Social Determinants of Health (SDH), which refers to the impact of non-medical factors on health outcomes, well-being, and quality of life. SDH encompasses the various environmental factors where individuals are born, grow, learn, work, play, worship, and age, and can significantly affect a broad range of health outcomes, functional abilities, and quality-of-life risks. SDH is also used as a metric to identify health disparities among vulnerable populations. Research has shown that SDH can be a more important factor than healthcare or lifestyle choices in determining overall health.

Indonesia is a lower and middle-income country (LMIC) that has struggled with reducing health disparities and improving its health system over the past decade. The incidence of non-communicable diseases has increased, creating a significant burden on the country's health system. In addition, health inequities have become a major challenge in Indonesia, as disparities between different groups are evident. Studies have shown that these disparities are often the result of policy failures to prevent populations from health crises. Achieving health equity will continue to be a major challenge for Indonesia unless progress is made.

The study that this report is based on utilized a mixed-method approach, combining a policy document review with qualitative research. The aim was to assess the key elements of SDH from various sources. Policy documents related to SDH that were regulated by non-health authorities were collected and reviewed, and in-depth interviews were conducted with policymakers and beneficiaries. The findings from this study, which were obtained from a variety of sources, are presented in this report.

Our report highlights both the progress and challenges in addressing social disparities of health in Indonesia. Positive trends of SDH in Indonesia were indicated by various indicators, including increased participation in social protection, more women represented in parliament, higher health expenditures, increased primary healthcare expenditures, and improved access to adequate sanitation. However, a declining trend in health promotion expenditure was observed, which may contribute to the health promotion efforts to reduce the health disparities in the country.

The SDH concept to address health disparities was new and not well-known among our informants. Hence, disparities were still observed between rural and urban settings, between wealthy and poor populations, between different regions and provinces, as well as among vulnerable groups. For example, the involvement of disability groups in the policymaking process was limited, as advocacy efforts by the disability community only recently started. Low access to healthcare was also still reported due to poor infrastructure and stigma from health workers towards vulnerable groups.

Further efforts are necessary to eliminate disparities between groups, as differences generated by distinct living environments, geographical barriers, and socio-economic levels continue to exist. As SDH concept applies to many aspects of life, all policymakers should consider the health impacts of each policy that they make. Therefore, promoting awareness and understanding of SDH among policymakers and beneficiaries is crucial in developing Health in All Policies (HiAPs). To meet such end, an inter sectoral agency such as the Coordinating Ministry for Human Development and Cultural Affairs should be appointed to take the lead in coordinating SDH approach to narrowing the health disparities in Indonesia.

CONTENTS

INTRODUCTION

1 INTRODUCTION

Health inequalities have become a major challenge worldwide. Recent studies have found significant disparities in health outcomes caused by non-medical factors such as education, employment, neighborhood, social support, and socioeconomic status, suggesting that the disparities were not a natural phenomenon but rather manifestly the consequence of policy failure [1-3]. In 2011, the World Health Organization (WHO) introduced the concept of Social Determinants of Health (SDH), that is the non-medical factors that influence health outcomes. SDH recognizes health as the outcomes of the conditions of daily life that are forced and shaped by economic policies and systems, development agendas, social norms, social policies, and political systems [4]. Studies have showed that non-medical factors can have a greater effect on health than healthcare or lifestyle choices [4-6]. Thus, understanding SDH is critical to reducing health disparities and improving overall health.

Indonesia, a lower- and middle-income country, has been struggling with health disparities and improving its health system for the past decade. In 2012, Indonesia had the highest maternal mortality ratio in the Southeast Asia region, with 359 deaths per 100,000 births [7]. This was much higher than other countries in the region, such as Thailand and Malaysia [8]. Indonesia also ranks eighth in the world for the largest number of neonatal deaths, with a significant gap between the wealthiest (10 neonatal deaths per 1000 live births) and poorest quintiles (29 per 1000) [7, 8]. Nababan et al. (2018) found that rural pregnant women in Indonesia had less access to healthcare than urban women [9, 10]. Children under five in Eastern Indonesia are more likely to be stunted than those in the Western region [11, 12]. The country faces both rising

non-communicable diseases and high incidences of communicable diseases [12].

The COVID-19 pandemic has affected global economic growth, including Indonesia's. The Southeast Asia region's economy declined by 3.4% in 2020, worse than the Asian monetary crisis of 1998 and the global financial crisis of 2009 [13]. Indonesia encountered an economic recession, with a decline of 5.32% in the second quarter of 2020 and 3.49% in the third quarter of 2020 [14]. The pandemic also increased Indonesia's unemployment rate from 4.94% in February 2020 to 7.07% in August 2020, resulting in 9.77 million unemployed people in August 2020, a 37.6% increase from the previous year [14, 15]. The economic impact of the pandemic may have affected Indonesia's socioeconomic groups and changed the health status of its most vulnerable populations.

Indonesia's health system has undergone changes over the past two decades, with a focus on improving its healthcare system. In 2004, the National Act No. 40/2004 concerning the National Social Security System was introduced [16, 17], which aimed to provide coverage for healthcare, work-related accidents, elderly care, and life insurance. In 2014, the National Health Insurance (Jaminan Kesehatan Nasional (JKN)) managed by the Social Security Organizing Agency (Badan Pengelola Jaminan Kesehatan (BPJS)) replaced the previous national security system [17]. JKN prioritizes providing easier access to healthcare for the entire population and includes subsidies for

low-income communities. Intersectoral collaboration has played a crucial role in reducing health inequalities, especially among vulnerable populations, by increasing access to healthcare and influencing the social determinants of health [18].

However, there have been limited studies and reports on the progress of addressing SDH in Indonesia. This study aims to identify the current state of health inequities and actions taken by the government in response to SDH, especially during the COVID-19 pandemic. Achieving health equity will be a major challenge for Indonesia if progress remains unknown. Therefore, this study aimed to identify key elements of the SDH actions that had been addressed in Indonesia. The specific objectives are to answer the following questions: What is the current state of health inequities, social determinants of health (SDH) actions, in Indonesia? What are the major actions of the government's achievement in addressing the determination of health in the past decade (since the Rio Political Declaration 2012)? What is the existing monitoring system on the social determinants of health inequities? How has COVID-19 affected the social determinants of existing health inequities in Indonesia? How has SDH influenced COVID-19 responses and recovery?

METHODS

2 METHODS

This report was produced through a study that employed three different methods to fulfill its objectives. Firstly, the analysis of secondary data from various sources was performed to describe the current state of SDH indicators. Moreover, compiling data from various data sources managed by government institutions and ministries aimed to investigate the existing monitoring system for SDH inequities. The secondary data showed that non-medical factors have caused inequities over time, including the effects of COVID-19 on SDH inequalities. Second, the Indonesian government's efforts to address SDH issues were studied through a review of policy documents, revealing efforts to eradicate inequity, promote transparency, encourage public participation, foster intersectoral collaboration, and address concerns regarding SDH issues. Finally, in-depth interviews were held to gather insights on SDH implementation from policymakers and beneficiaries. These interviews aimed to examine the key aspects of SDH, challenges, obstacles, and chances for SDH implementation within the governance system. The use of multiple methodologies was intended to give a more thorough understanding of SDH issues using relevant data and sources. Ethical approval for the study was given by the ethic committee of Atma Jaya Catholic University of Indonesia (0007V/III/PPPE.PM.10.05/09/2022).

Secondary data

To demonstrate the current status of Indonesia's SDH, this report relied on secondary data analysis. Indicators related to the five main domains of the Rio Political Declaration on Social Determinants of Health in 2011 were used to evaluate the progress of

SDH in Indonesia, as recommended by the WHO's Working Group for Monitoring Action on the Social Determinants of Health [19]. To determine the trends of inequities in Indonesia, data was gathered from the Indonesian Socioeconomic Survey (SUSENAS), the Information System and Regional Basic Data Management (SIMREG), and the Basic Health Survey (RISKESDAS).

The Indonesian Socioeconomic Survey (SUSENAS) is a comprehensive national survey that provides a representation of the Indonesian household population. The survey includes a roster of household members with information such as gender, age, marital status, educational attainment, income, health care, nutrition, household income and expenditure, and labor force experience. SUSENAS is conducted annually to capture the socioeconomic status of households in Indonesia and the data is collected by the Indonesian Statistics Bureau [20].

The Basic Health Research (RISKESDAS) is a comprehensive and periodic survey conducted every five years by the Indonesian Ministry of Health to assess the key health indicators of households across the nation. The survey aims to gather information on various aspects of health and health services, including health status (such as disability, morbidity, nutrition, and injury), environmental health (such as hygiene, sanitation, latrines, water, and housing), knowledge-attitude-behavioral health (such as medical treatment, clean and healthy lifestyle, tobacco use, alcohol consumption, physical activity, and risky food consumption behavior), and access, coverage, quality of service, and health financing. This survey is an important tool in measuring the progress and addressing the challenges in maintaining the health and well-being of the Indonesian population. [21].

The SIMREG database is a digital platform managed by the National Development Planning Agency. It collects and compiles basic data from various national surveys in Indonesia and links it to Sustainable Development Goals (SDGs) indicators, providing a comprehensive picture of the country's development progress at the provincial and district levels [22]. The data gathered by SIMREG plays a critical role in the formulation and implementation of effective and evidence-based policies and programs for the achievement of the SDGs [22].

Policy documents review

In August 2022, the research team conducted a systematic search of national programs and policies related to the Social Determinants of Health (SDH). The legal documents were selected based on two criteria: 1) they had to target health issues and 2) be issued by

non-health sector ministries or government institutions. The team utilized the online database of the Network of Documentation and Legal Information (Jaringan Dokumentasi dan Informasi Hukum (JDIH)) from each relevant ministry and government institution to access the legal documents.

In-depth interviews

The in-depth interviews were conducted from September to November 2021 after the completion of the analysis of secondary data and policy documents. The goal was to gain a comprehensive understanding of the progress of SDH in Indonesia and to identify the key elements, challenges, barriers, and opportunities related to SDH. The interview instrument was developed using a checklist provided by WHO SEARO and five major domains from the Rio Political Declaration on Social Determinants of Health in 2011, which included promoting better governance for health and development, enhancing participation in policymaking and implementation, redirecting the health sector to reduce health inequities, strengthening global governance and collaboration, and monitoring progress and accountability.

Invitations to participate in the in-depth interviews were sent to potential informants who were identified as policy makers and beneficiaries, as shown in Table 1. The research team followed up with each potential informant to arrange a convenient time for the interview. Policy makers consisted of Indonesian ministries and government institutions responsible for formulating and implementing health regulations. Beneficiaries represented vulnerable groups, such as those living with HIV/AIDS, people with disabilities, and the elderly, who received benefits from federal regulations. In total, fourteen in-depth interviews were conducted, with seven interviews conducted with policy makers and seven interviews with beneficiaries.

Seven ministries and government institutions out of sixteen potential stakeholders were successfully interviewed. Nine potential informants did not respond to our invitation and communication. Data concerning key elements of stakeholders' perspectives was collected from the following informants:

1. Main Expert Deputy II, Office of the Presidential Staff
2. Director of Synchronization of Regional Government Affairs III, Directorate General of Regional Development, Ministry of Home Affairs
3. Directorate of Poverty Reduction and Community Empowerment, National Development Planning Agency
4. Head of SDGs Secretariat, National Development Planning Agency

Table 1 *List of key informants*

No	Potential key informants	Interview status
Policy makers		
1	Directorate of Health Promotion and Community Empowerment, Ministry of Health, Republic of Indonesia	✗
2	Head of Advocate, Directorate of Health Promotion and Community Empowerment, Ministry of Health, Republic of Indonesia	✗
3	Main Expert Deputy II, Office of the Presidential Staff	✓
4	Head of Center of Health Policy, Health Development Policy Agency	✗
5	Director of Synchronization of Regional Government Affairs III, Directorate General of Regional Development, Ministry of Home Affairs	✓
6	Directorate General of Social Protection and Security, Ministry of Social Affairs, Republic of Indonesia	✗
7	Directorate of Poverty Reduction and Community Empowerment, National Development Planning Agency	✓
8	Head of SDGs Secretariat, National Development Planning Agency	✓
9	Deputy for Gender Equality, Ministry of Empowerment of Women and Children	✗
10	Directorate General of Early Childhood Education, Basic Education and Secondary Education, Ministry of Education and Culture	✗
11	Deputy for Family Welfare and Family Development, National Population and Family Planning Agency	✓
12	Deputy for Training, Research and Development, National Population and Family Planning Agency	✗
13	Director of Harmonization of Development of Facilities and Infrastructure of Disadvantaged Areas, Directorate General of Acceleration of Development of Disadvantaged Areas, Ministry of Villages, Development of Disadvantaged Regions, and Transmigration of the Republic of Indonesia	✓
14	Coordinating Ministry for Human Development and Culture	✓
15	National Team for the Acceleration of Poverty Reduction	✓
16	COVID-19 Task Force/Committee for Handling Covid-19 and National Economic Recovery	✗
Beneficiaries		
17	Chairman of the Indonesian Association of Persons with Disabilities (representative for disability)	✗
18	Chairman of the Indonesian Association of Women with Disabilities (representative for women with disability)	✗
19	Senior policy advisor on the Strategic Purchasing for Primary Healthcare project, Thinkwell	✓
20	Expert on health policy and management, Faculty of Public Health, Universitas Indonesia	
21	Expert on environmental health particularly impact of climate changes to public health, Faculty of Public Health, Universitas Indonesia	✓
22	Chairman of The SMERU Institute	✗
23	Head of FORMASI Disabilitas (representative for disability)	✓
24	Yayasan Emong Lansia (representative for elderly people)	✓
25	Indonesian Association of Gerontic Nurses (representative for elderly people)	✓
26	Yayasan Kasih Suwitno (representative for HIV/AIDS group)	✓
27	Yayasan Kusuma Buana (representative for the HIV/AIDS group)	✓

5. Deputy for Training, Research and Development, National Population and Family Planning Agency
6. Coordinating Ministry for Human Development and Culture
7. National Team for the Acceleration of Poverty Reduction

Informants from beneficiary groups were experts and professionals who worked in universities, NGOs, and groups of representatives. Invitations were sent to eleven potential informants from the beneficiary group. Seven informants responded to the invitation, consisting of the following groups:

1. Senior policy advisor on the Strategic Purchasing for Primary Healthcare project, Thinkwell
2. Expert on environmental health particularly impact of climate changes to public health, Faculty of Public Health, Universitas Indonesia
3. Head of FORMASI Disabilitas (representative for disability)
4. Yayasan Emong Lansia (representative for elderly people)
5. Indonesian Association of Gerontic Nurses (representative for elderly people)
6. Yayasan Kasih Suwitno (representative for HIV/AIDS group)
7. Yayasan Kusuma Buana (representative for the HIV/AIDS group)

An interviewer and a note-taker conducted an in-depth interview via virtual meetings for approximately 1.5 hours. All informants were informed about the topic, overview, and research objectives and they acknowledged the process of data collection, including recordings during interviews and transcriptions. Data can be accessed only by the investigators. Informants received a small amount of money for the time they spent participating in the interviews.

Analysis

Desk review

Current state of SDH

The descriptive analysis was performed to assess the trend over years of the suggested indicators. The following quantitative indicators suggested by the WHO's Working Group for Monitoring Action on the Social Determinants of Health (2018) were used to assess the state of a country's SDH [19]:

1. Proportion of children who participated in early childhood education
2. Income inequities in the level of public social protection
3. Proportion of health expenditure to state expenditure
4. Proportion of primary health care and health promotion expenditure to the health expenditure

5. Proportion of population with catastrophic health expenditure
6. Proportion of social protection between males versus female
7. Proportion of female representatives in the parliament
8. Proportion of population who had access to safe drinking water

As Indonesia is an archipelago country consisting of 37 provinces and 515 districts, distribution by spatial analysis and by type of residence (i.e., rural vs urban) was conducted for the available data. QGIS was employed to map the inequities by provinces and/or by districts if the aggregate data were available.

Major action in addressing SDH

In this step, the existence of policies and strategies to address SDH inequities was analyzed through legal document review. The following investigation was performed to capture the included regulations and the detailed major actions in addressing SDH:

1. Existence of a national policy that supports routine consideration of health equity in health promotion and disease prevention programs
2. Existence of a national policy that supports routine consideration of health equity
1. Policies aiming at providing equal access for women and adolescents to access adequate information about reproductive health
2. Mechanisms of intersectoral action for health and health equity
3. Mechanisms for guaranteeing transparency in policymaking
4. Public participation mechanisms in the policymaking process
5. Public access to obtain sufficient information about policies related to SDH
6. Elements in national policies to address health inequities and social determinants of health

Existing monitoring of SDH

The analysis of existing monitoring of SDH included:

1. List of data sources that are used in this study
2. Comparison of each data source highlighting survey objectives, sample size, frequency of data collection, inequities and inequalities, institutions managing the database, and access to the database

Impacts of COVID-19 on SDH

Trends of inequities over the years were described to depict the SDH achievement in Indonesia. To determine the impact of the COVID-19 pandemic on SDH, the analysis was conducted through investigating changes in inequities and inequalities in 2020 and afterwards. Indicators of WHO's Working Group for Monitoring Action on the Social Determinants of Health (2018) were used to assess the changes in trends of inequities and inequalities.

Responses and recovery to address inequities due to the COVID-19 pandemic

The government's actions to prevent the severe impacts of COVID-19 on inequities and inequalities in Indonesia were compiled. The actions indicated as responses and recovery of COVID-19 were programs and regulations that have been adopted specifically, to handle COVID-19 during the pandemic and programs and regulations that had been adopted before the COVID-19 pandemic but were strengthened during COVID-19 to eradicate increasing gaps and disparities due to the pandemic. The compilation included aids, cash assistance, and a vaccination program. The objectives, the multisectoral collaboration, and the targets of the program were described.

Content analysis

A thematic content analysis was conducted

Table 2 *Theme and sub-theme in the study analysis*

Theme	Sub-themes
The understanding of SDH	Frequently mentioned social factors Obstacles to implement SDH
Government and multi sector collaboration	Consideration to include SDH in policy making Participation of other government institutions in the policy making Obstacles to include SDH in policy making
Community participation	Community participation in policy making Obstacles to ask community in policy making
Health sector orientation	Leaders of social inequality issues Role of government institutions in social inequality eradication Capacity Impacts of social inequalities on accessing health facility Role model of health authority in health inequality eradication
Global governance	Participation of health sector at national and global forum of social issues Obstacles to implement global concept of equity and equality
Monitoring and accountability	Data sources to monitor SDH Obstacles to monitor SDH Recommended government institution to monitor SDH
Impacts of COVID-19 on SDH	Social inequality during COVID-19 pandemic Responses and recovery programs to prevent an increasing social inequality during COVID pandemic Outputs of national programs Obstacles to perform COVID-19 responses and recovery

throughout the interview results. Table 2 presents themes and subthemes used in the present work, which were created to incorporate similar findings that depicted key findings pertaining to the key elements of SDH in Indonesia and to best address research questions. This study explored seven themes of key elements of the SDH actions, comprising the understanding of SDH, government and multi-sector collaboration, community participation, health sector orientation, global governance, monitoring and accountability, and the impact of COVID-19 on SDH in Indonesia.

RESULTS

3 RESULTS

Trends of inequities and inequalities

Children who participated in early childhood education.

Figure 1 displays the trend in the participation of children in early education in each province of Indonesia over the years. The average proportion of children participating in early education in the country was around 35%. The trend fluctuated in most provinces, with many of them being below the average, with Papua, West Kalimantan, and North Sumatra having the lowest proportions. Yogyakarta, East Java, and Gorontalo, on the other hand, had the highest proportions. The disparities among the provinces as indicated by the trend over the years are quite noticeable, with most provinces below the average and only a few above it. Additionally, there was no significant change observed in the position of the provinces relative to the national average over the years.

Figure 2 showcases the disparity in the participation level of children in early education across the major islands and provinces in Indonesia. The map reveals an even distribution of moderate participation levels in all provinces of Papua Island.

However, on Sumatra and Java Islands, a noticeable disparity in early education can be seen, with no province on both islands displaying high participation. In contrast, Kalimantan and Sulawesi Islands indicate higher participation levels, with clusters of higher participation evident.

Health expenditure

In Figure 3, trends of health expenditure in the general state expenditure indicate a considerable increase over years. The proportion has soared by approximately three times in the last decade. The COVID-19 pandemic hitting last 2019 seems to inflict the

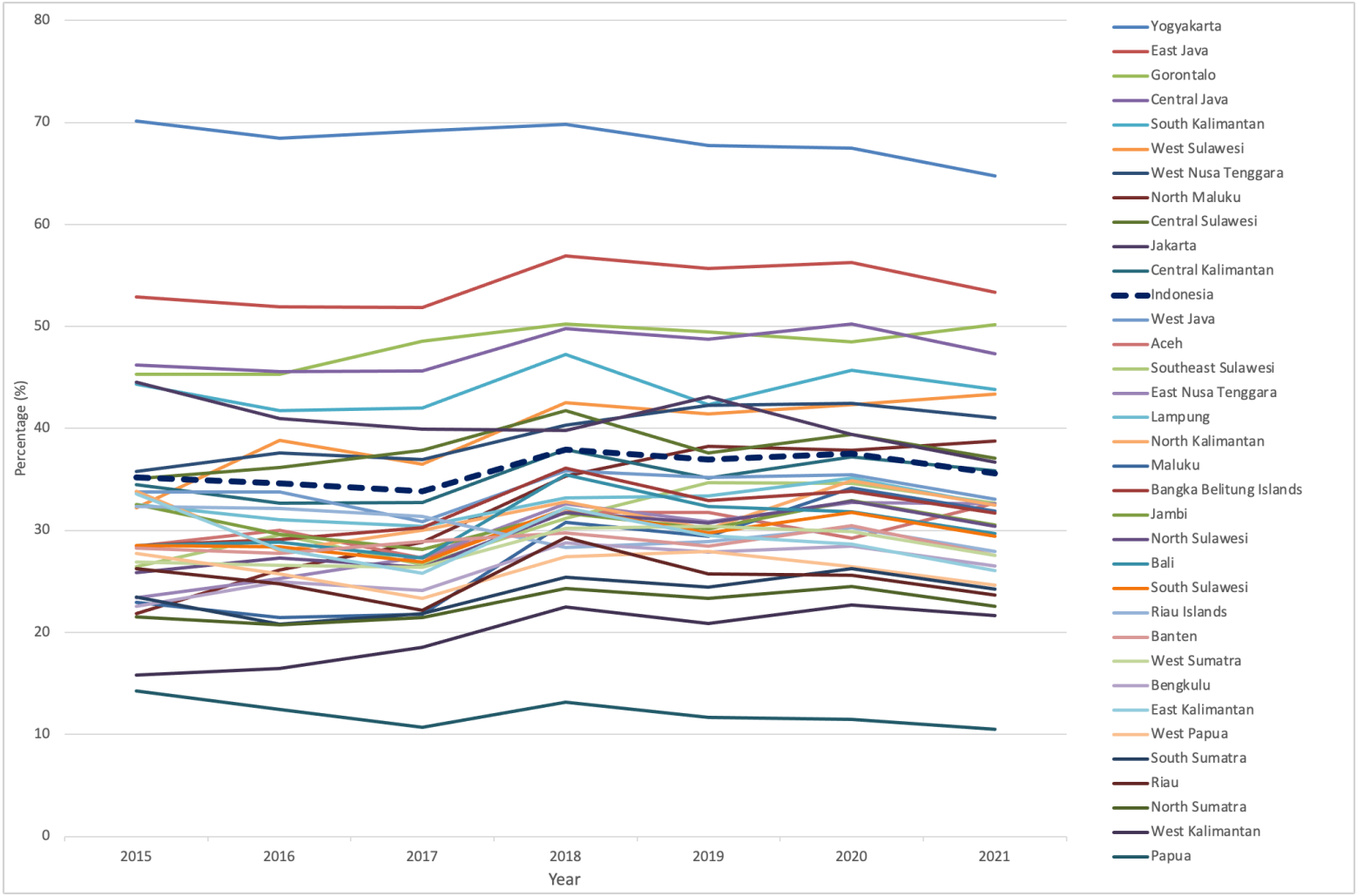

Figure 1 *Proportion of children participating in early education by province between 2015 until 2021.*

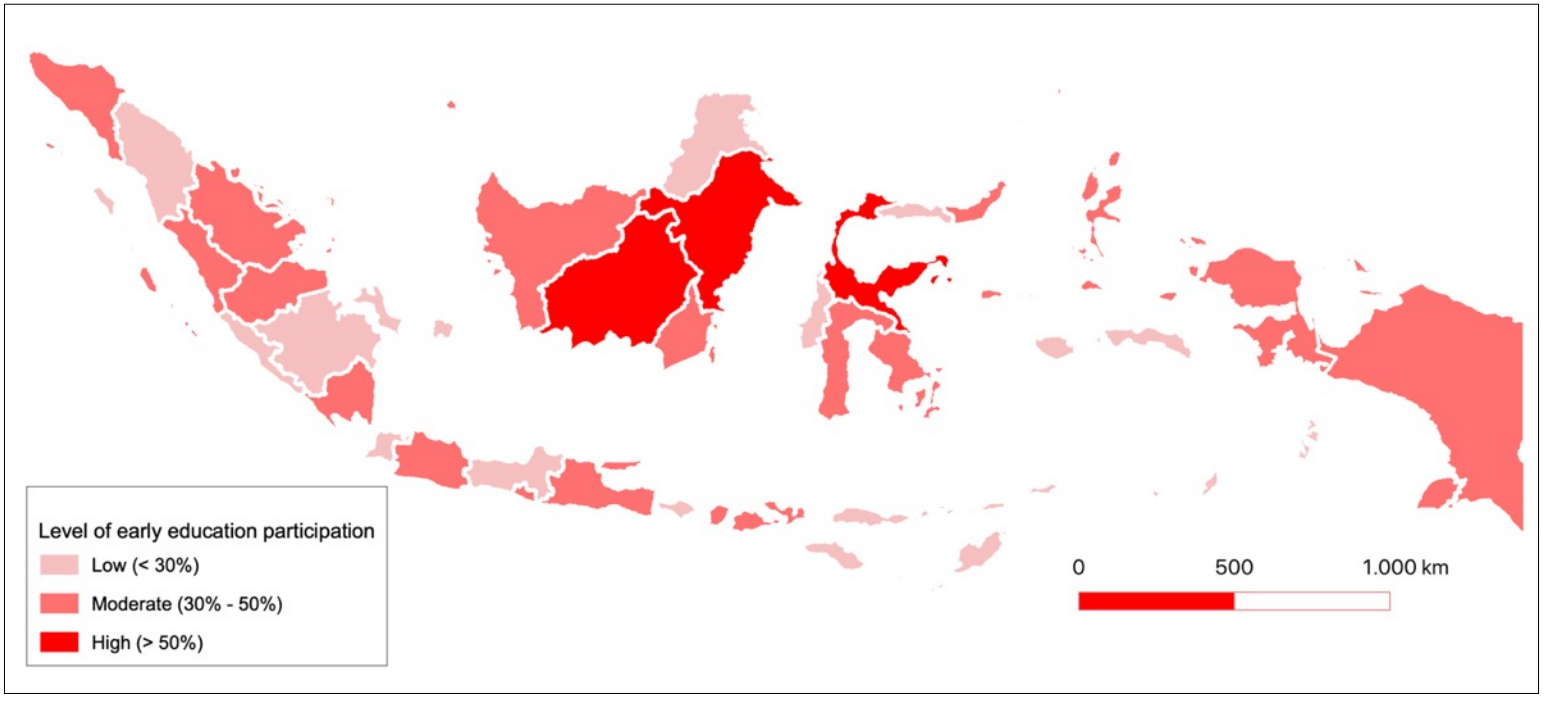

Figure 2 *The level of children participating in early education by provinces in 2021.*

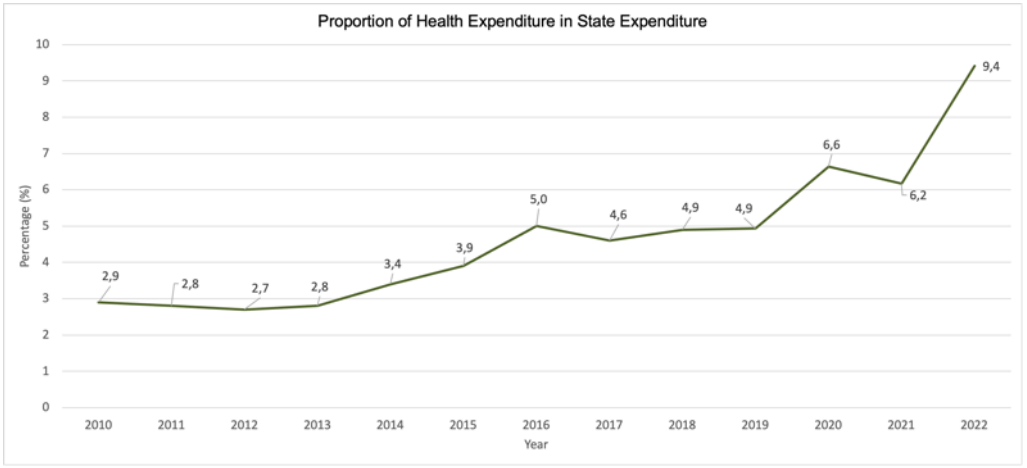

Figure 3 *Proportion of health expenditure in the state expenditure from 2010 to 2020.*

need to reduce the impact of the pandemic by providing higher health expenditure for treatment. The proportion of health expenditure increased to 9.4% in 2022 after a slight decrease in 2021.

Figure 4 presents the health promotion and primary health care expenditure proportion in the country's health expenditure. Although the general health expenditure, as depicted in Figure 3, indicated an increasing trend, especially during the COVID-19 pandemic, the health promotion expenditure proportion declined by around 50% for the last five years (from 2017 to 2021). The lowest proportion was observed in 2020, constituting about 0.12%. However, the primary health care expenditure demonstrated a fluctuation between 2011 and 2018, but displayed an extensive growth afterwards (from 2018 to 2021). Overall, a quadruple increase was estimated from 2011 to 2020, although the proportion slightly decreased to 21% in 2021. An increasing trend of primary health care expenditure seems to be affected by the COVID-19 pandemic as the increasing burden in primary health care may follow to maintain COVID-19 treatment.

Social protection

The number of participants in the National Health Insurance (JKN) has moderately increased over the years. Figure 5 describes that there has been a steady increase as the trend continues to grow from 49% population covered by JKN in 2014 to 77% in 2018. The proportion of participation is likely to continue growing after 2018.

Figure 6 compares the proportions of JKN participation between poor and wealthy communities from 2017 to 2021. Overall, the participation among poorer communities was

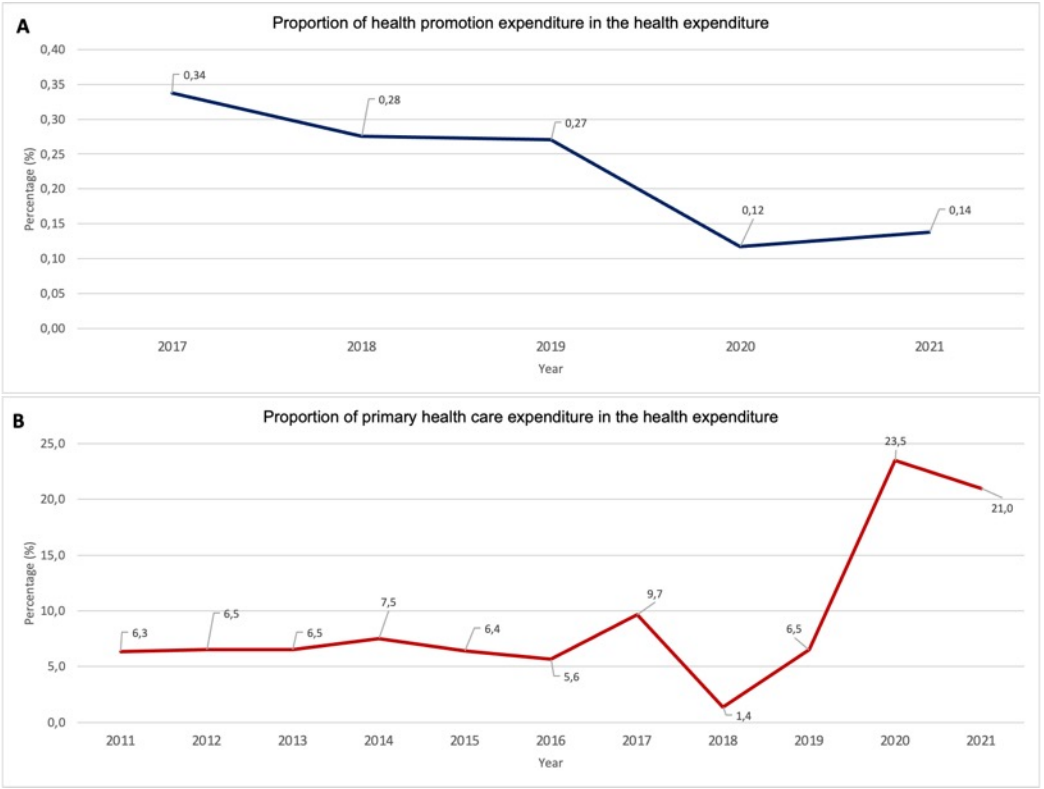

Figure 4 *Proportion of health promotion (A) and primary health care (B) expenditure to the health expenditure over years.*

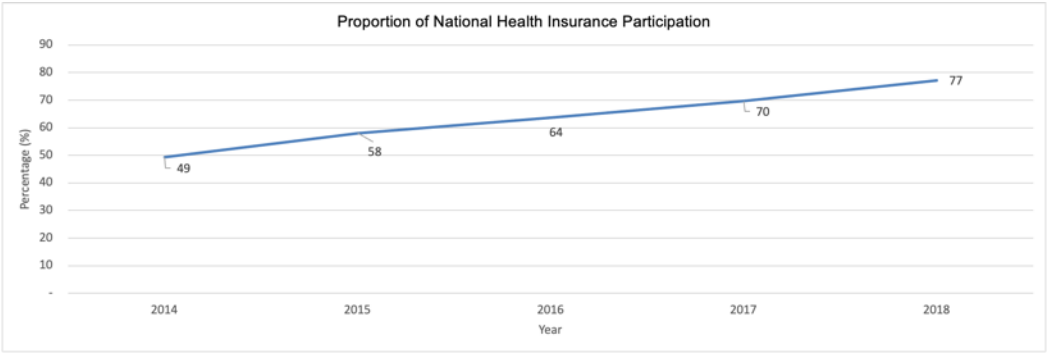

Figure 5 *Proportion of population participating in national health insurance scheme between 2014 until 2018.*

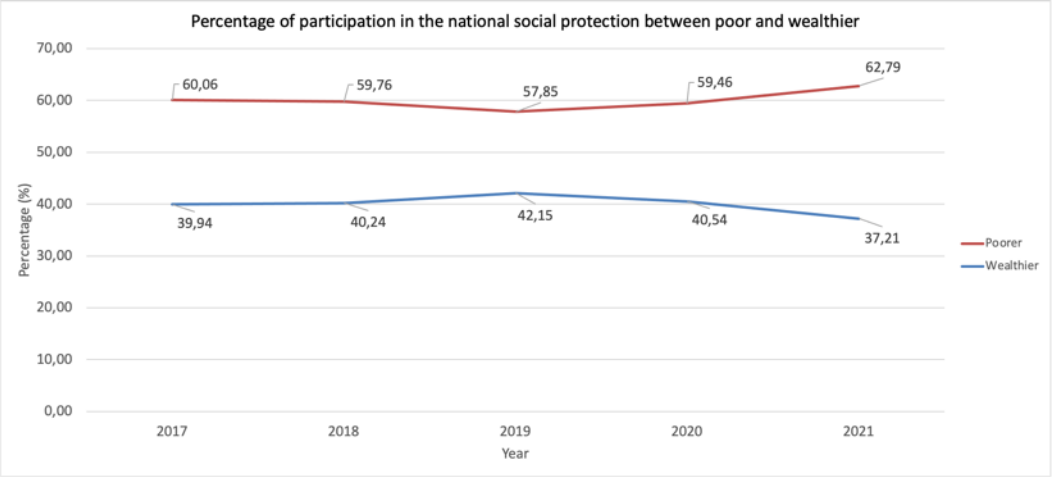

Figure 6 *Proportion of participation in national health insurance scheme between 2017 until 2021 by wealth group.*

higher than wealthier groups. The COVID-19 pandemic may increase the participation of poor communities in the national social protection as the proportions increased after a slight drop in 2018. Trends of both groups slightly remained steady although a moderate decrease in JKN participation in poor communities was observed and a moderate increase in participation occurred in 2019. Between 2017 and 2021, the participation rate of JKN increased around 2.73% among poor communities and decreased around the same amount.

A comparison of JKN participation by gender is described in Figure 7. The participation rate in JKN among women was slightly lower than men over the years. The proportion was nearly equal in 2020, in which 50,4% men and 49.6% women registered in JKN. According to the graph, the rate of women participation in JKN is expected to remain lower than in men in JKN.

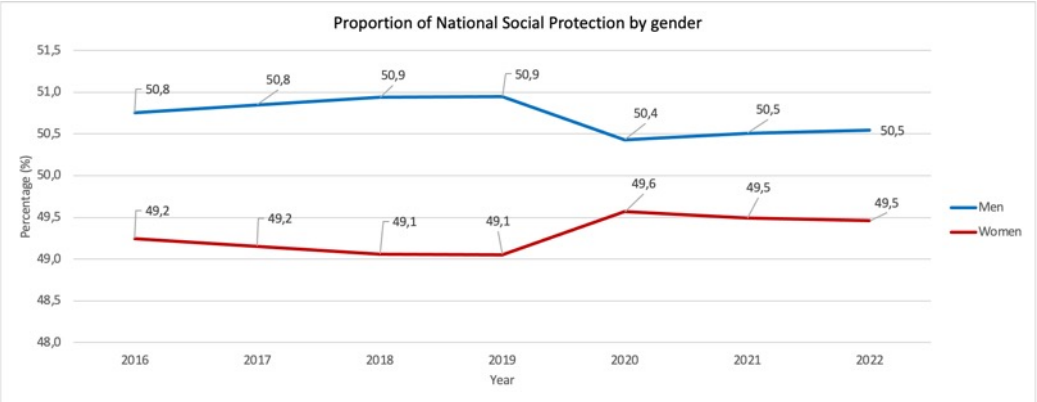

Figure 7 *Proportion of National Social Protection between men and women over years.*

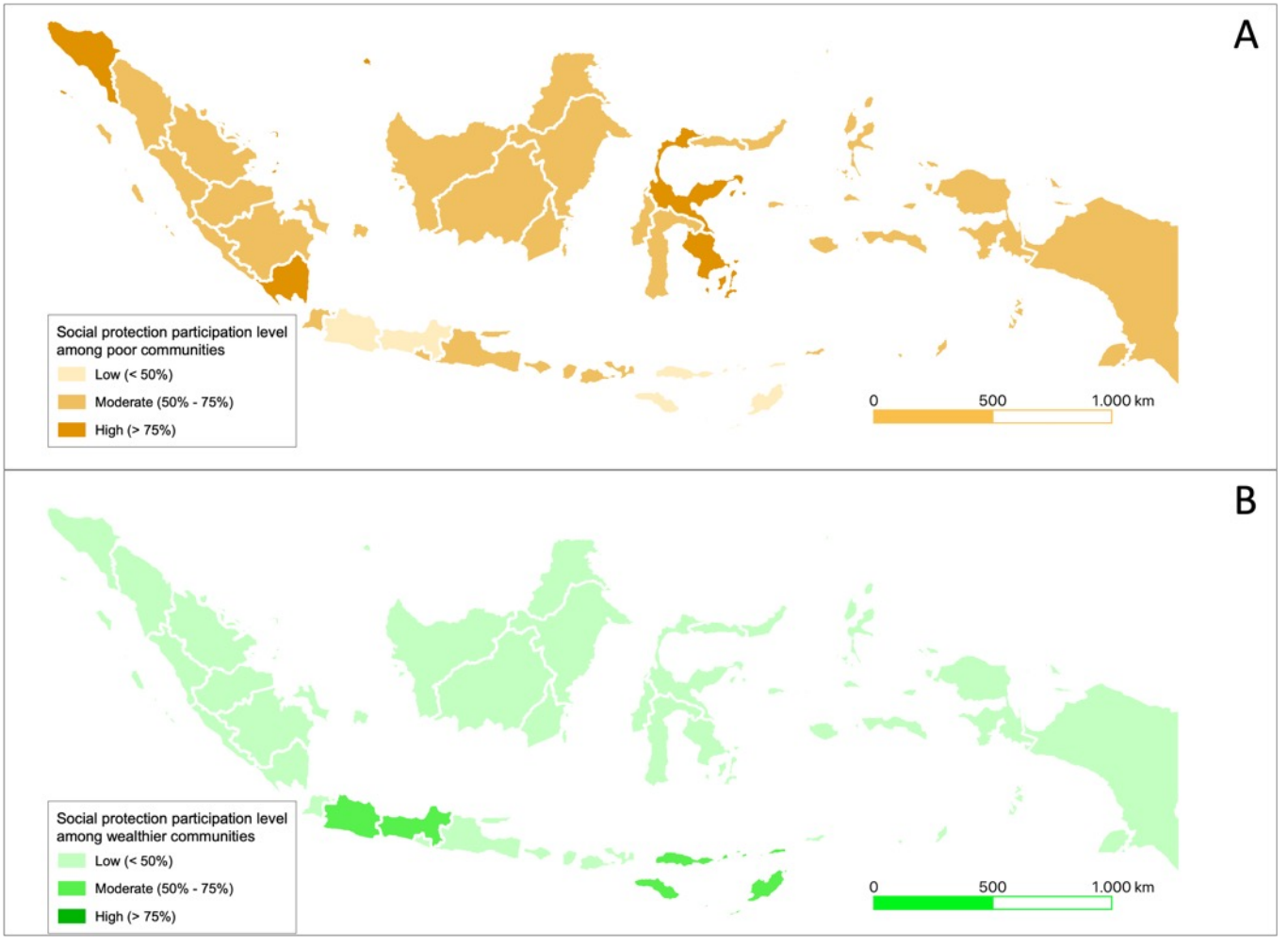

Figure 8 *Level of participation in national health insurance scheme in 2021 among poor (A) and high wealthy communities (B) by provinces.*

Figure 8 shows the proportion distribution across the country concerning the participation in the national insurance scheme among poor and wealthy communities. Among poor communities, the overall participation rate was moderate, in which the moderate rate was observed in all provinces on Kalimantan and Papua Islands, the majority on Sumatra Island, several provinces on Sulawesi, Bali, and Maluku Islands, and a few provinces on Java Island. Java Island possessed the major area with a low participation rate of poor communities in the national health insurance scheme. The high participation rate (above 75%) was observed in two provinces on Sulawesi and two provinces on Sumatra.

Female representatives in the parliament

The rate of female representatives in parliament is described in Figure 9. The national proportion over the years indicates an increasing trend of women participating in politics and parliament. In 2021, the participation rate reached 21.9% and this rate increased by around 2.6% in about seven years.

The proportion of female representatives in parliaments by provinces is depicted in Figure 10. There is little disparity in the distribution of representation across areas. Provinces in Kalimantan, several in Nusa Tenggara, Sumatra, and Sulawesi Islands demonstrate a moderate level of female participation in parliament. Conversely, low levels of female representation are evident in Java, Sumatra, and Papua Islands. On the other hand, a small number of provinces in Sumatra, Sulawesi, Maluku, and Papua boast a high proportion of female representatives in parliament.

Population with access to safe drinking water

Figure 11 presents the trends in access to safe drinking water over the years by province. The data shows a steady increase in access at

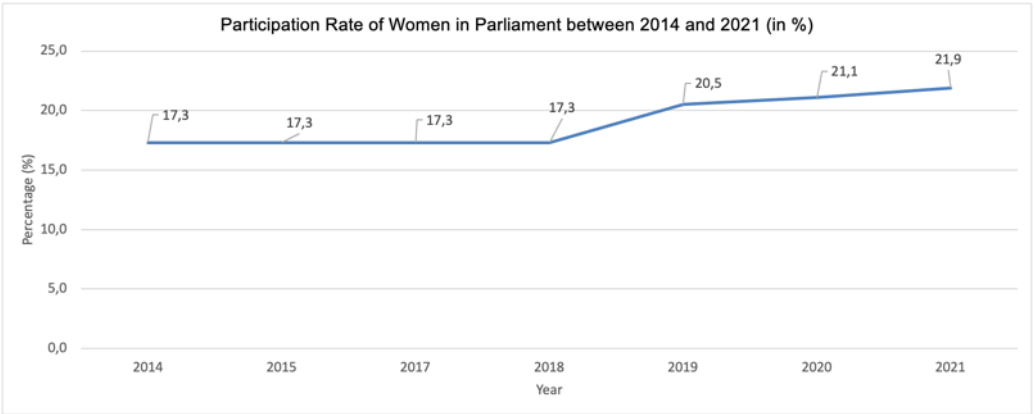

Figure 9 *Proportion of women representatives in parliament between 2014 and 2021.*

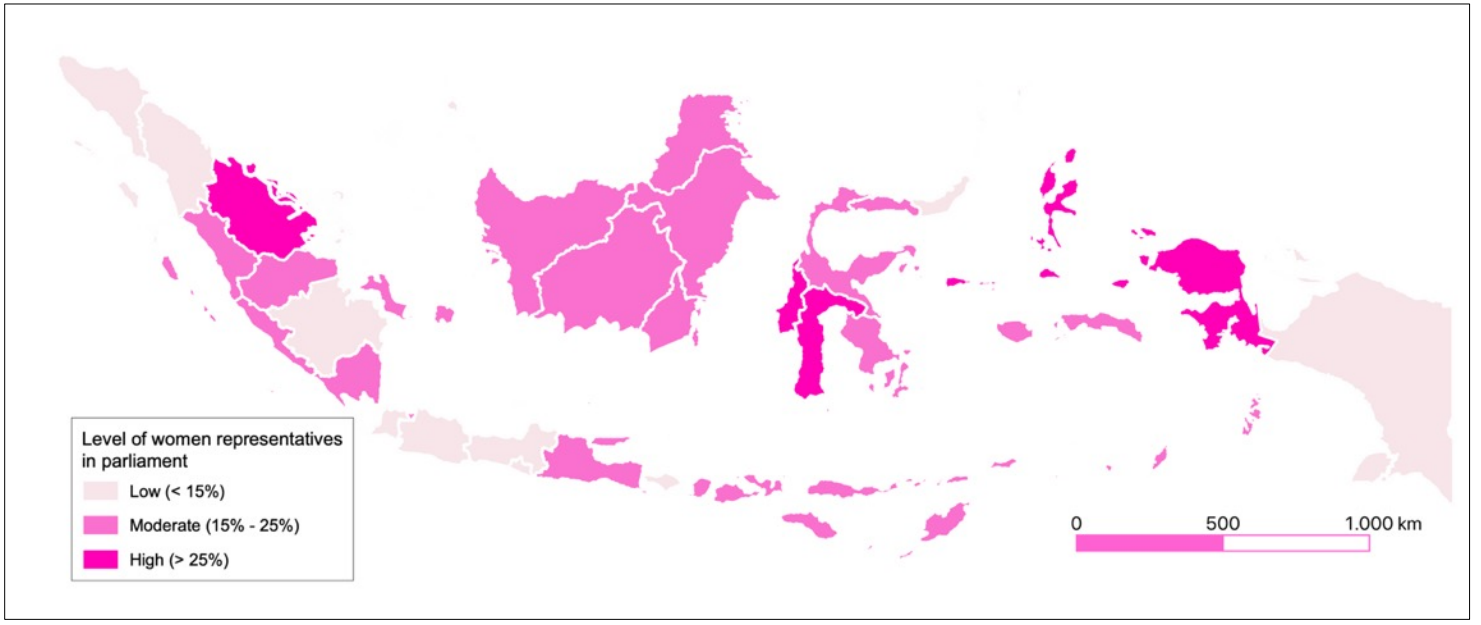

Figure 10 *The level of women representatives in 2021 by provinces.*

both the national and provincial levels. Approximately half of the provinces in Indonesia have a higher proportion of households with access to safe drinking water than the national average, while the rest fall below 90%. Jakarta, Bali, and Yogyakarta rank as the provinces with the highest proportion of households with access to safe drinking water. Conversely, the provinces with the lowest proportion are Papua, Bengkulu, and Bangka Belitung Islands, respectively.

Figure 12 illustrates the proportion of households with access to safe drinking water, differentiated by type of residence. The graph reveals an upward trend in access to safe drinking water between 2016 and 2021 in both urban and rural areas. Despite a diminishing gap in access to drinking water between urban and rural areas, urban areas consistently had a higher proportion of safe drinking water access compared to rural areas. The highest proportion of households with access to safe drinking water was found to be 96% in urban areas, while 93% in rural areas.

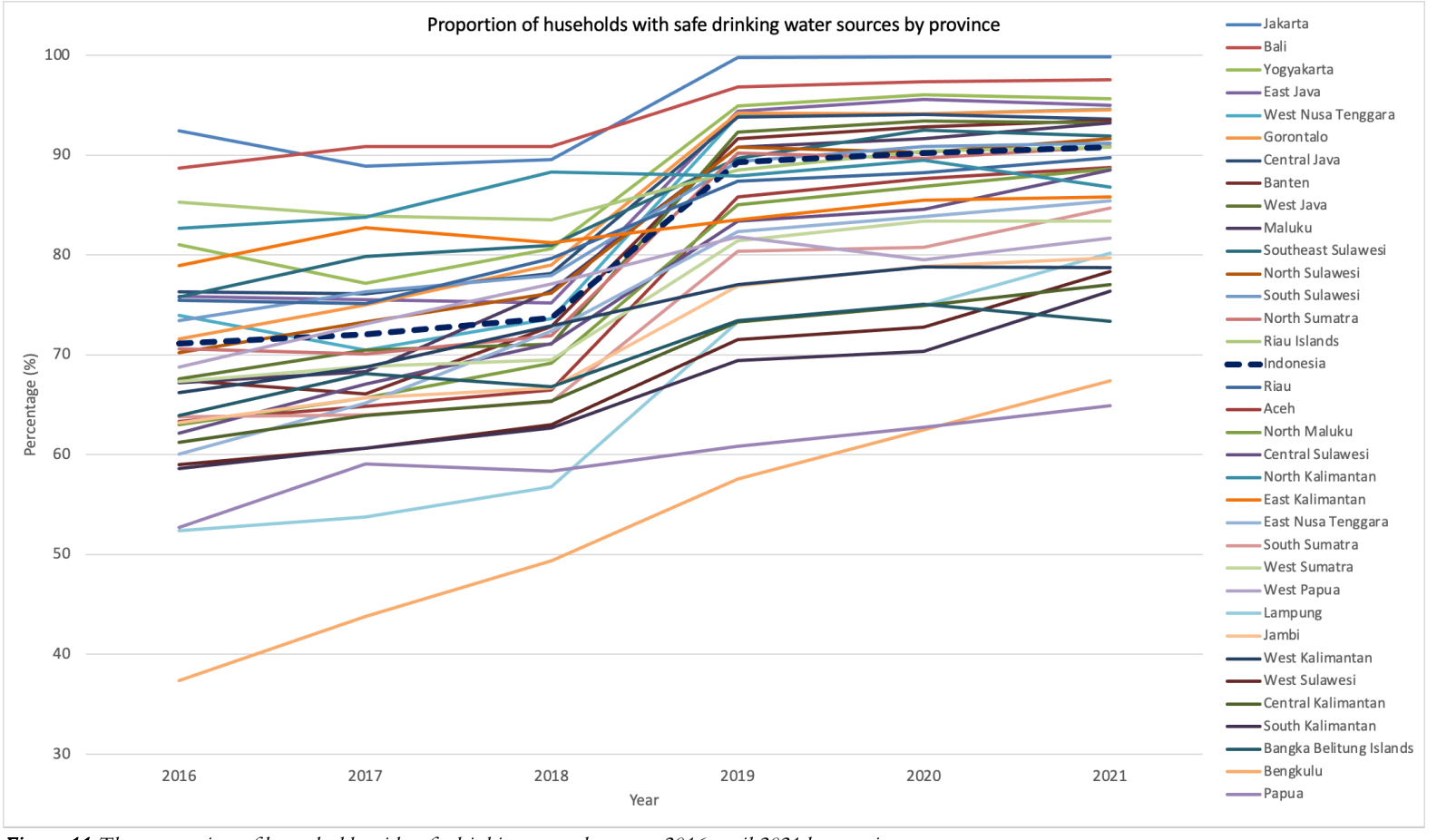

Figure 11 *The proportion of households with safe drinking water between 2016 until 2021 by province.*

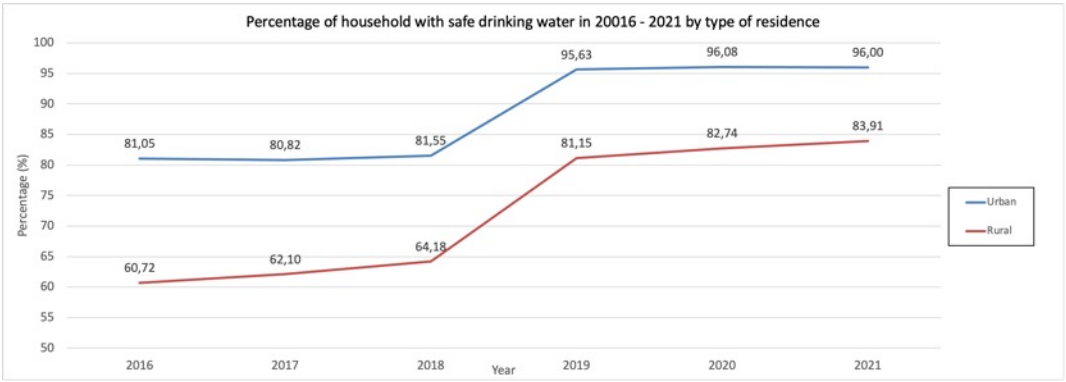

Figure 12 *The proportion of households with safe drinking water between 2016 until 2021 by type of residence.*

Poverty

The trends of poverty in Indonesia are depicted in Figure 13. Over the years, the poverty rate in Indonesia showed a slight decline, starting from 12.49% in 2011 and reaching its lowest point in 2019 at 9.22%. However, the COVID-19 pandemic had a noticeable impact on poverty in Indonesia, causing a 10% increase in the poverty rate in 2020. Despite this setback, the trend of poverty reduction has continued in the following years, though at a slower pace.

The distribution of poverty levels by provinces in 2021 is depicted in Figure 14. The spatial distribution reveals clusters and disparities between western and eastern regions of Indonesia. Provinces located on Sumatra and Sulawesi Islands have higher poverty rates compared to other areas, while lower poverty levels are seen on Papua, Java, and Nusa Tenggara Islands. On Kalimantan Island, moderate poverty levels dominate. Despite moderate poverty levels dominating in most provinces on Sulawesi, one province displays a high poverty rate.

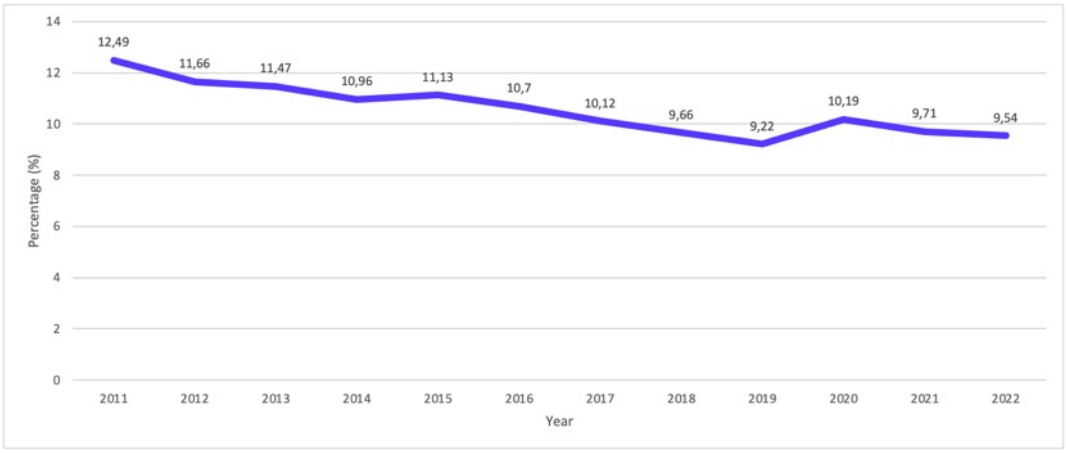

Figure 13 *Trends of poverty in Indonesia between 2015 and 2022.*

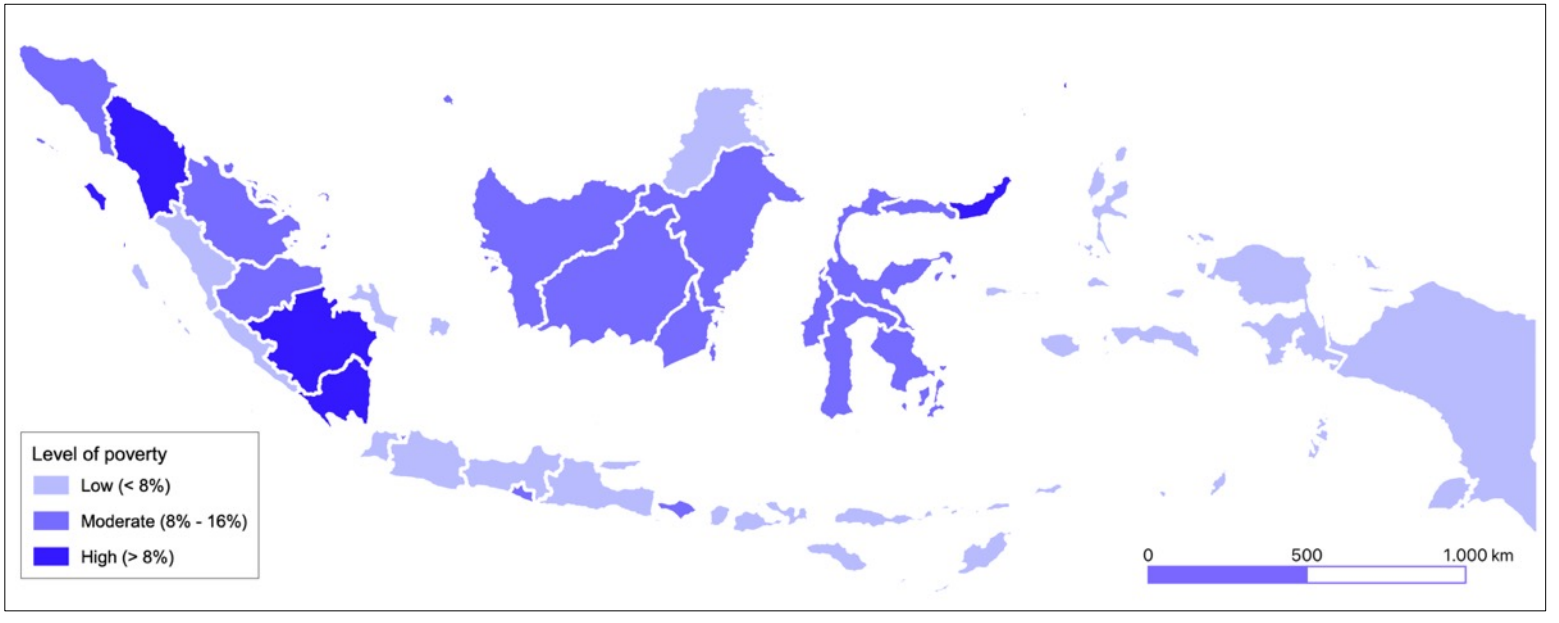

Figure 14 *The poverty level in 2021 by provinces.*

Unemployment

The annual trends of the unemployment rate in Indonesia are provided in Figure 15. The graph shows that the unemployment rate level decreased between 2015 and 2020 and reached the lowest point in 2021, constituting about 4.94%. However, the rate of unemployment rate soared and reached the peak in 2021. The shown trend seems affected by the COVID-19 pandemic as the proportion of poverty remained higher after 2020 than before 2020.

Figure 16 presents a map of the unemployment rate across Indonesian provinces in 2021. The data reveals disparities in the levels of unemployment, not only between different regions but also within the same islands. There were two provinces in Kalimantan and one in Java with high levels of unemployment. The majority of provinces in Java, Papua, Bali, Nusa Tenggara, and Maluku reported moderate levels of unemployment. Meanwhile, Sumatra Island showed a mix of both low and moderate levels. The lowest unemployment rates were observed in most provinces of Sulawesi Island.

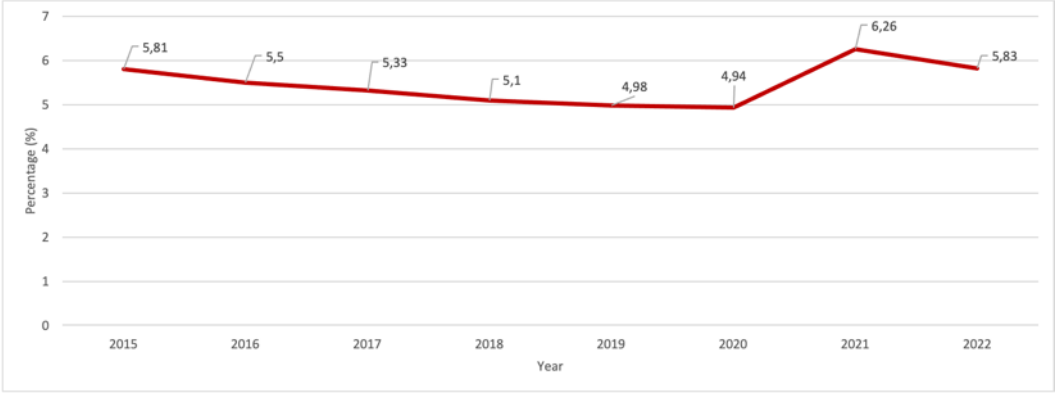

Figure 15 *Trends of poverty in Indonesia between 2015 and 2022*

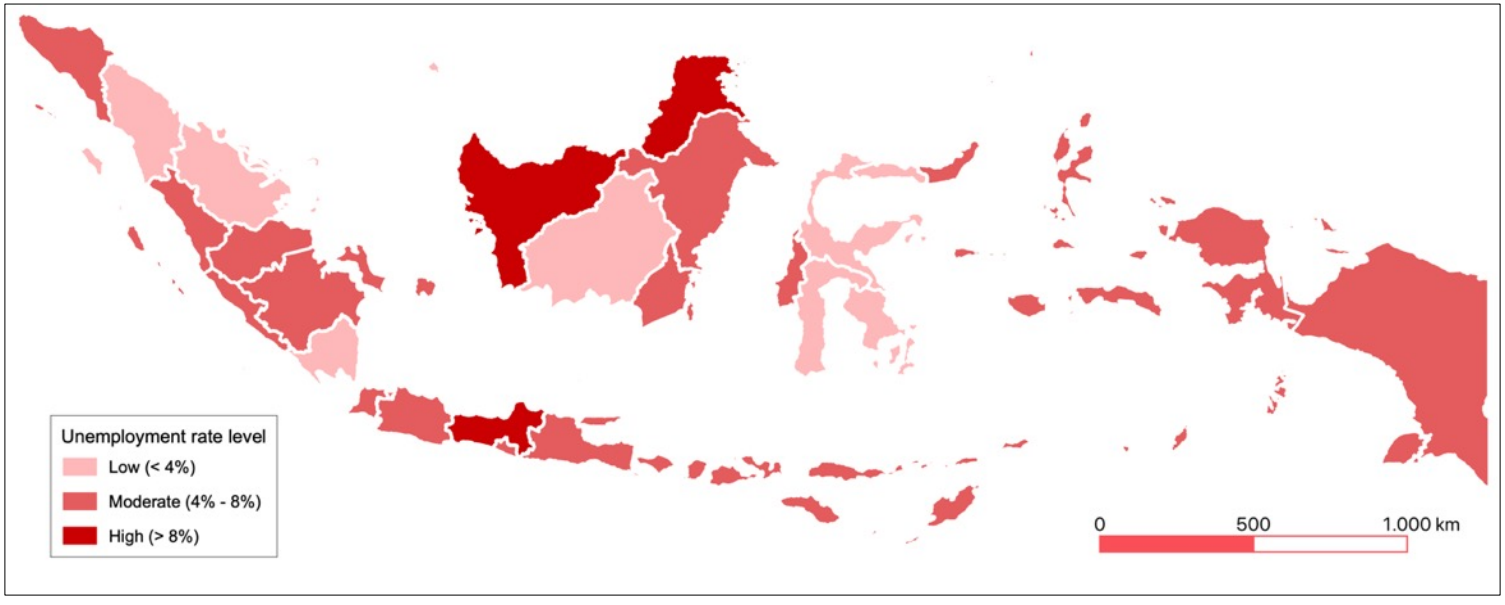

Figure 16 *The unemployment level in 2021 by provinces.*

Awareness of SDH

All interviewees recognized the impact of social and non-medical factors on health outcomes. Nevertheless, there was a lack of understanding regarding the concept of SDH and its connection to health. The majority of informants identified economics, education, sanitation, and geography as the key social factors affecting the health status and outcomes in Indonesia. Social inequality in accessing healthcare was cited as a prime example of social determinants in the country.

> *"Factors influencing health outcomes are income, occupation, education that have impacts on health."* Directorate General of Regional *Development, Ministry of Home Affairs.*

> *"I do not acknowledge social determinants of health, so I am less familiar with it"* SDGs Secretariat, National Development Planning Agency.

The results showed that the informants had a limited understanding of the concept of SDH. As a result, health considerations were not yet thoroughly integrated into the policy-making process and regulations. Most informants acknowledged that the implementation of SDH was limited to discussions in policy development and had not been widely put into practice.

> *"SDH is a new thing and so it is not well implemented".* Office of the Presidential Staff.

> *"Factors influencing health outcomes are income, occupation, education that have impacts on health."* Directorate General of Regional *Development, Ministry of Home Affairs.*

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Governance

Multisectoral collaboration

The findings suggest that the idea of social determinants of health (SDH) was not fully understood by the informants. As a result, health has not been incorporated into the policy-making process in a comprehensive manner. Most of the informants acknowledged that the implementation of SDH was limited to discussions in policymaking and was not widely implemented. With the exception of the National Development Planning Agency, the role of health in policymaking was not fully recognized. The informants reported that prior to the interviews, health was only considered in regulations related to sanitation,

housing, and infrastructure. The National Development Planning Agency and the National Team for the Acceleration of Poverty Reduction played a role in raising awareness of health issues by advocating and making recommendations to relevant government agencies when drafting policies. For example, the Ministry of Public Works and Housing initiated a pilot program for elderly-friendly homes due to this advocacy.

> *"SDH becomes a consideration, yes. But the depth depends on how close the policy is related to health issue."* Office of the Presidential Staff.

In some cases, the policy-making process for health issues involved collaboration between various government agencies and involved community participation to accommodate the needs of the community. These activities included following international treaties related to health, such as global frameworks for elderly people and/or HIV/AIDS and incorporating these into national programs. The Ministry of Home Affairs also played a role in supporting local governments to develop district or provincial action plans involving local health authorities. As a result, health was included in the local policy-making process.

> *"Our role is mainly to coordinate development and general control so that health policy can operate in the sub-national settings. Ministry of Home Affairs must facilitate the regions making action so that the health sector can operate."* Directorate General of Regional Development, Ministry of Home Affairs.

Our informants identified two major obstacles in the multisectoral collaboration of health-oriented policy-making and national programs. First, weak coordination was a major issue due to sectoral self-interest and unclear pathways for coordination. For instance, policies that considered health issues were often assumed to be the responsibility of the Ministry of Health, leading other government agencies to believe that health was not relevant to their main duties, and to revoke their participation. Second, the collaboration in health-oriented policies and programs was often not sustained due to frequent changes in official and administrative positions, leading to new officials not being able to perform optimally in the multisectoral collaboration. To overcome these barriers, our informants suggested that the National Development Planning Agency and the Coordinating Ministry for Human Development and Culture would be the most relevant state institutions to coordinate programs aimed at eradicating social inequality, which would also address health issues.

> *"This might be a big challenge for the coordination because multisectoral collaboration involves many ministries and government institutions. The coordination should be carried out not only in the*

implementation, but also since the planning." Office of the Presidential Staff.

"The Coordinating Ministry for Human Development and Culture is the most suitable as the coordinator" Directorate General of Regional Development, Ministry of Home Affairs.

Of course the National Development Planning Agency is the coordinator" FORMASI Disabilitas.

Health-oriented sector

Several government agencies took part in addressing social inequalities related to health, based on their core responsibilities and functions. For example, the National Development Planning Agency was responsible for the planning of all social issues, while the National Team for the Acceleration of Poverty Reduction was involved in the Task Force for the Acceleration of Extreme Poverty Elimination. Meanwhile, at the community level, community groups contributed to reducing social inequalities by collecting data on disparities in access to health facilities, particularly among marginalized groups.

"The decision making during COVID-19 pandemic is very quick. Honestly, we are involved in all social issues and planning." SDGs Secretariat, National Development Planning.

"For the involvement, our institution is a part of the Task Force for the Acceleration of Extreme Poverty Elimination program" National Team for the Acceleration of Poverty Reduction.

The capacities of different institutions to address social inequalities in health varied based on their authority and core responsibilities. The Ministry of Home Affairs played a role in the creation of national and regional development plans and had the ability to coordinate sub-national and local governments. The National Team for the Acceleration of Poverty Reduction was capable of analyzing social inequalities and presenting recommendations to relevant government entities and ministries. At the community level, professional associations like the Indonesian Association of Gerontic Nurses trained community health center workers to assist families caring for elderly individuals with health issues at home.

"We facilitate the preparation of planning documents, starting from BMD (Local Deliberation Agency) to RKPD (Local Government Work Plan). Now the RKPD is an action plan for all activities including health affairs, social affairs." Directorate General of Regional Development, Ministry of Home Affairs.

"Actually, our studies indicate some recommendations for JKN. We did advocacy to JKN that the poor need to receive JKN and must become JKN participants, so they have access to health services." National Team for the Acceleration of Poverty Reduction.

Most informants agreed that social inequalities significantly contributed to disparities in accessing healthcare facilities. This was evident in the lack of registration among certain groups, stigma faced by marginalized

communities, and the high cost of reaching healthcare facilities. For instance, many elderly individuals living in rural areas were not registered for JKN, and due to poor information dissemination, many new mothers failed to register their children for JKN, leading to delayed healthcare for their children. Additionally, people living with HIV often encountered negative stigma from healthcare workers, deterring them from seeking medical treatment.

To address these inequalities, the Ministry of Home Affairs provided guidance on ensuring minimum standards for healthcare services in regional areas. This aimed to promote equal access to healthcare for all communities and narrow the gap between wealthy and underprivileged communities in accessing healthcare services. However, access to healthcare was still largely focused on state- owned facilities and did not engage private healthcare sectors in JKN, resulting in high costs for underprivileged communities to access private healthcare facilities. Furthermore, transportation costs and time to reach the closest healthcare facilities remained a major issue in accessing healthcare in Indonesia.

> *"We often get reports about discrimination to our friends living with HIV in accessing health facilities. Usually, it comes from the health workers who do not understand social aspects of HIV. They often blame our friends "That's all your fault!", "Don't be a sex worker!", "Don't be a night worker if you don't want to get HIV!" when getting into health facilities."* Yayasan Kusuma Buana.

The Ministry of Health was seen by some informants as a leader in addressing social inequalities, particularly in the financing of health services and ensuring equal access to healthcare facilities. The informants associated the National Health Insurance program (JKN) with the Ministry of Health, as it provided free health coverage for low-income communities. Several informants also mentioned that the Ministry of Health had undertaken initiatives to promote healthy lifestyles, such as promoting physical activity, safe riding, healthy food, health markets in schools, and healthy cities. However, it was reported that these campaigns were limited in their reach, as they did not effectively reach individuals with disabilities and those living in rural areas.

> *"I think Ministry of Health is an adequate role model in health financing, especially their health policy such as BPJS which is used by all people without looking their economic status."* Yayasan Kasih Suwito.

> *"We see that the campaign performed by Ministry of Health is quite good. For example, the letterhead of Ministry of Health puts GERMAS (Healthy Living Movement) logo. Therefore, we remember GERMAS."* National Team for the Acceleration of Poverty Reduction.

Table 3 *List of regulations addressing inequities and inequalities in Indonesia*

Year	Type of regulation	Number	Concern
1945	National constitution	-	Human rights (Chapter XA), Education (Chapter XIII), The National Economy and Social Welfare (XIV),
2000	Presidential Instruction	9	Gender Mainstreaming in National Development
2005	Joint Regulation of the Minister of Home Affairs and the Minister of Health concerning the Implementation of Healthy Districts/Cities	Number: 34 of 2005 and Number: 1138/MENKES/PB/ VIII/2005	Encouraging community aspirations and participation in determining the direction, priorities, and regional development planning of healthy and safer city
2008	National Act	40	Elimination of Racial and Ethnic Discrimination
2010	Presidential Regulation	15	Poverty Reduction Acceleration
2011	National Act	13	Poverty Management
2014	National Act	35	Amendment of National Act No 23 of 2002 concerning Child Protection
2016	National Act	8	Disability
2020	Presidential Regulation	36	Development of Working Competencies through Pre-employment Card
2021	National Act	2	Special Autonomy for Papua Province
2021	Presidential Regulation	105	National Strategies of Development Acceleration in Underdeveloped Regions in 2020-2024

Regulation concerning equity and equality

National regulation

The national constitution guarantees basic human rights as the foundation of all policies and daily life. These rights include the right of children to grow up free from violence and discrimination, the right to legal certainty, freedom of religion, the right to choose education, work, citizenship, and residency, the right to assembly, association, free speech, and freedom from torture. Additionally, the constitution also extends the right to education and social welfare. The government is mandated to provide access to education for all citizens and allocate 20% of the state budget towards education. In the chapter on social welfare, the state is obligated to take care of the underprivileged.

Table 3 outlines the regulations aimed at reducing inequities and promoting equality in Indonesia. The majority of these regulations are enacted by the President and the National House of Representatives (Dewan Perwakilan Rakyat abbreviated DPR). The Indonesian government places significant emphasis on reducing economic inequalities, as evidenced by the multiple policies aimed at poverty reduction and welfare development. These policies include: the President Regulation No. 25 of 2020 on Poverty Reduction Acceleration, the National Act No. 13 of 2011 on Poverty Management, the Presidential Regulation No. 36 of 2020, providing free job training to improve competencies, the National Act No. 2 of 2021 aimed at reducing disparities between Papua and other provinces, and the Presidential Regulation No. 105 of

Table 4 *List of regulations addressing inequities and inequalities in health, regulated by non-health sector institutions Indonesia*

Year	Type of Regulation	Number	Concern
2005	Joint Regulation of the Minister of Home Affairs and the Minister of Health concerning the Implementation of Healthy Districts/Cities	Number: 34 of 2005 and Number: 1138/MENKES /PB/VIII/2005	Implementation of Health City/District
2012	Presidential Regulation	109	Materials that Contain Addictive Substances in Tobacco Products in the Interests of Health
2013	Presidential Regulation	12	Health Insurance
2017	Presidential Regulation	72	Stunting Reduction Acceleration
2017	Presidential Instruction	1	Healthy Community Movement
2017	Ministry of National Planning Development	11	General Guideline of Healthy Community Movement Implementation
2020	Presidential Regulation	82	Committee for COVID-19 Control and National Economic Recovery

2021 aimed at accelerating development in underdeveloped regions. To address gender discrimination, the Presidential Instruction No. 9 of 2000 was introduced, promoting women's participation in national development. The national Act No. 8 of 2016 focuses on protecting the rights of people with disabilities in all aspects of life. Racial and ethnic discrimination is regulated under the National Act No. 40 of 2008. Child protection is addressed by the National Act No. 35 of 2014, which outlines the rights of children. The Ministry of Home Affairs and the Ministry of Health have adopted a policy on Healthy City and District, which encourages community involvement in determining the priorities and direction of a healthier and safer city.

Non-health authority regulation

Table 4 presents regulations aimed at addressing health inequities and inequalities that have been established by non-health sector institutions. Most of these regulations, which aim to eradicate health disparities, have been adopted by the president. The presidential regulations and instructions related to health include control of tobacco products as addictive substances for public health, implementation of the national health insurance program, reduction of stunting, promotion of the healthy community movement (GERMAS), and creation of the Committee for COVID-19 Control and National Economic Recovery (KPCPEN). The implementation of a healthy city and district is established through a joint regulation between the Ministry of Home Affairs and the Minister of Health, aimed at promoting clean, comfortable, safe, and healthy living conditions for the population, which is accomplished through the implementation of various integrated agreements and activities agreed

upon by the community and local government. In 2017, the Ministry of National Planning Development (BAPPENAS) released a comprehensive guideline for the implementation of GERMAS, which was initially adopted by the president.

International treaties and conventions ratified by Indonesia

Table 5 lists international conventions, treaties, and agreements that Indonesia has ratified to advance equality and equity of fundamental human rights. Indonesia has ratified two conventions from the International Labour Organization (ILO) and five from the United Nations (UN). The ILO conventions include promoting equal pay for male and female employees (1951) and prohibiting discrimination in employment based on race, gender, political views, and religion (1958). The UN conventions address enhancing economic, social, and cultural rights (1966), combating racial discrimination and promoting racial harmony (1969), eliminating all forms of discrimination against women (1984), protecting the rights of children (1989), and ensuring equal employment opportunities and fundamental freedoms for people with disabilities (2006).

Table 5 *List of international conventions and frameworks concerning equities and equalities ratified by Indonesia*

Year	Title	Organization	Concern
1951	Equal Remuneration Convention	International Labour Organization	All the convention members commit to implement equal renumeration for male and female employee.
1958	Discrimination (Employment and Occupation) Convention	International Labour Organization	The Discrimination Convention is an anti-discrimination convention which addresses discrimination based on race, sex, political opinion, or religion, aiming at eliminating discrimination in employment and position.
1966	International Covenant on Economic, Social and Cultural Rights	United Nations	Countries that have ratified this treaty fully commit to fulfil the economic, social and cultural rights of individuals. The rights include labour rights, health rights, education rights, and the right to a decent standard of living.
1969	International Convention on the Elimination of All Forms of Racial Discrimination (ICERD)	United Nations	This Convention commits all its members to the elimination of racial discrimination and the promotion of understanding among all races.
1984	Convention on the Elimination of All Forms of Discrimination against Women	United Nations	This convention defines what constitutes discrimination against women and sets up an agenda for national action to end such discrimination.
1989	Convention on the Rights of the Child	United Nations	The Convention on the Rights of the Child is part of the legally binding international instruments for the guarantee and the protection of Human Rights, aiming to protect the rights of all children in the world.
2006	The Convention on the Rights of Persons with Disabilities and its Optional Protocol (A/RES/61/106), 2006	United Nations	The purpose of this Convention is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity.

Community Participation in the policymaking

Our findings suggest that the involvement of communities in the policy-making process often occurs through non-governmental institutions or community organizations, such as associations for people living with disabilities, HIV/AIDS communities, the elderly, and others. Both national and local associations are often asked to provide input during the policy-making process. Specific community organizations may therefore benefit from the resulting regulations.

> *"Usually, the National Development Planning Agency invites us in the policymaking process. Currently, they are developing national action plans for people with disability."* FORMASI Disalibilitas.

However, our informants acknowledged some challenges in engaging communities in the policy-making process. This includes inaccuracies in data related to certain groups, the unavailability of associations for certain groups such as people living with mental illness, LGBTQ groups, inadequately represented communities that struggle to communicate their aspirations to policymakers, and communities that are unaware of their rights. In addition, negative stigmas towards certain communities can also limit their participation. For example, people living with HIV encountered difficulties in participating in policymaking as it may lead to exposure. While some communities, such as the elderly and HIV/AIDS groups, were regularly involved in the policy-making process, others were less involved, and the disability community's involvement has so far been focused on charity.

> *"Vulnerable groups do not acknowledge their rights."* Thinkwell.

> *"If they hold an event and they invite us, sometimes it confuses us. There are so many spectrum and type of disability. For example, usually, they provide an interpreter, and it is fine for our deaf friends. However, our blind friends may have difficulties."* FORMASI disabilitas.

Global governance

At the global level, health diplomacy is often conducted by the Ministry of Foreign Affairs. According to our informants, the Ministry of Health lacks the capacity to effectively participate in global diplomacy. At the national level, it was reported that the Ministry of Health has not yet issued any regulations aimed at addressing social inequality issues in health.

> *"International diplomacy is always performed by the Ministry of Foreign Affairs. Hence, Ministry of Foreign Affairs has a duty outside Indonesia. They bring the issues to the country, and we discuss the issue."* National Development Planning Agency.

Our informants stated that the implementation of global concepts and treaties related to equality is weak and requires strong commitment from policymakers in Indonesia. Furthermore, there is a shortage of human resources that needs to be addressed. Government bodies face a shortage of funding to address social inequality issues. Research on equality in Indonesia has yet to result in a strong push to increase equality in society. Another hindrance in implementing global treaties is the weak flow of information from the top-down, leading to misinformation at various levels of government.

> *"The challenges are lack of health facilitator, facilities and infrastructure, funding, human resources, and their competencies. Another challenge is to increase the commitment of policy makers, not only one institution but all government bodies from national to regional. The successful health outcomes are not maintained only by health sectors. For instance, if we have issues of health among households, we also need to involve housing which is not a responsibility of health authorities."*
> Directorate General of Regional Development, Ministry of Home Affairs.

Table 6 *List of Surveys in Indonesia Comprising of Potential Indicators of SDH*

No	Institution	Survey name	Period of data collection	Method
1	Central Bureau of Statistics (Badan Pusat Statistik abbreviated BPS)	National Socioeconomic Survey (Survey Sosial Ekonomi Nasional abbreviated SUSENAS)	Annual	Cross-sectional
2	National Institute of Research and Development, Ministry of Health	National Health Indicator Survey (Survei Indikator Kesehatan Nasional abbreviated Sirkesnas)	2016	Cross-sectional
3	National Institute of Research and Development, Ministry of Health	Basic Health Research (Riset Kesehatan Dasar abbreviated RISKESDAS)	2007, 2010*, 2013, 2018	Cross-sectional
4	Central Bureau of Statistics, National Family Planning Coordinating Agency (Badan Kependudukan dan Keluarga Berencana Nasional abbreviated BKKBN), and Ministry of Health	Indonesia Health Demographic Survey (Survey Demografi Kesehatan Indonesia abbreviated SDKI)	1987 (SPI), 1991, 1994, 1997, 2002/2003, 2007, 2012, 2017, and 2022	Cross-sectional
5	Ministry of Social	Integrated Social Welfare Data (Data Terpadu Kesejahteraan Sosial abbreviated DTKS)	Twice annually (before 2020); Four times annually (after 2020)	Cross-sectional
6	RAND and Gadjah Mada University	Indonesian Family Life Survey (IFLS)	1993-1994, 1997-1998, 2000, 2007-2008, and 2014-2015	Longitudinal

Monitoring system of SDH in Indonesia

Table 6 presents the national databases commonly utilized to track health and inequality indicators in Indonesia. Six national databases are listed as possible resources for monitoring SDH indicators in the country and are managed by various government agencies and research centers. However, the majority of these national surveys are conducted independently within each institution, leading to a lack of integration among different governmental ministries and institutions in the monitoring process. Furthermore, most of these surveys are not follow-up studies (i.e. cohort studies or longitudinal studies), making the existing monitoring system insufficient as a surveillance system for SDH in Indonesia.

The Central Bureau of Statistics in Indonesia regularly conducts the SUSENAS survey, which takes place annually and covers all provinces and districts. This survey aims to gather extensive socioeconomic data on the population, including education, health, nutrition, housing, culture, household income and expenditure, travel, and wealth level. SUSENAS is more established compared to other national surveys in Indonesia, as trends of socioeconomic and non-medical indicators have been available for over a decade. The survey is conducted under a well-established system with robust instruments and a well-organized data collection process.

The Ministry of Health administers SISKERNAS, which aims to track progress of

the Strategic Plan and National Medium-Term Development Plan (RPJMN) between 2015 and 2019. The data collection is done through observation of health facilities as primary data and utilization of reports and documentation from health facilities, health authorities, and households as secondary data. However, SISKERNAS only covers a limited number of health indicators.

The National Institution of Research and Development within the Ministry ofHealth conducts the RISKESDAS survey every five years to provide a snapshot of the health status of the population across Indonesia. RISKESDAS uses multistage sampling to produce a representative sample of all districts in the country, and it operates using a cross-sectional study design. While RISKESDAS covers education, occupation, and sanitation information among non-medical factors, it falls short compared to other national surveys in Indonesia.

The SDKI survey is maintained by three different government institutions, including Additionally, the the Central Bureau of Statistics, National Family Planning Coordinating Agency, and the Ministry of Health, and aims to collect information on birth rates, mortality, family planning, and other reproductive health issues in Indonesia. The survey has been conducted in 1987, 1991, 1994, 1997, 2002/2003, 2007, 2012, and 2017, with the National Family Planning Coordinating Agency (BKKBN) being replaced by the National Research and Innovation Agency (BRIN) in 2022.

DTKS is the primary source used by the Indonesian government to determine targets for social protection and poverty reduction programs. DTKS aims to develop integrated and well-directed social welfare programs and plans among different ministries, government agencies, local governments, and the community. The data in DTKS includes information on populations requiring social welfare services, beneficiaries of social assistance and empowerment, and potential sources of social welfare. However, since DTKS focuses on capturing poverty in Indonesia, the variables are limited to income level and occupation, which are frequently updated. This makes DTKS slightly incomplete compared to other data sources in Indonesia.

IFLS is a longitudinal survey conducted in 13 provinces in Indonesia by non-governmental institutions. The survey aims to study individual behaviors and health outcomes, and it covers indicators of economic and non-economic well-being, as well as aspects of the physical and social environment, infrastructure, employment opportunities, food prices, access to health and educational facilities, and the quality and prices of services

available at those facilities. The fifth wave of IFLS was conducted in 2014-2015, following four previous waves in 1993-1994, 1997-1998, 2000, and 2007-2008.

Our informants did not specifically monitor social inequality in health. The Ministry of Home Affairs is one of the government bodies that monitor social inequality issues, and they obtain reports from regional authorities and sub-national stakeholders. These reports are the result of frequent monitoring, which can be conducted monthly, bi-monthly, or tri-monthly. SUSENAS includes variables of socioeconomic issues at the household and individual levels, but the raw data is expensive, not highly accessible, and does not represent vulnerable groups.

> *"It is difficult to find data about disability in Indonesia because data about disability Indonesia were quite invalid."* FORMASI Disabilitas.

Obstacles in the social inequality monitoring were vary. Most informants reported that difficulties in accessing data, less reliable data for sustain monitoring, inadequate instrument to determine vulnerable groups, and lack of monitoring staff and system were encountered. Moreover, data were abundant as each government bodies possessed different data of social inequalities. Our informants recommended a collaborative effort in the social inequality monitoring especially in health issue to have one data access. Moreover, this may avoid different data measurements.

> *"Clearly, the obstacle in the social inequality monitoring is lack of human resources and funding."* National Team for the Acceleration of Poverty Reduction.

> *"Lack of monitoring staff, weak monitoring system, and lack of funding."* Directorate General of Regional Development, Ministry of Home Affairs.

> *"They need to collaborate. In the collaboration, they will find a better way to synchronize data because each government bodies may have different guidelines in the monitoring."* Office of the Presidential Staff.

COVID-19 responses and recovery

Impacts of COVID-19

According to our sources, economic inequality emerged as a significant issue during the COVID-19 pandemic in Indonesia. The pandemic particularly affected the employment sector, leading to job losses and an increase in poverty. This made access to healthcare challenging for many people. Additionally, the switch to online education posed difficulties for individuals with disabilities, particularly those with hearing or visual impairments who needed additional software to participate in online classes.

"We are now in the global economic recession and many industries are getting weak during COVID-19 pandemic. These has impacted to our economic capacity. Not all

economic sectors can recover quickly. The unemployment rate increases, followed by the escalating number of poor people." Main Expert Deputy II, Office of the Presidential Staff.

> "Exactly, economic disparity becomes an issue because many people loss their jobs during pandemic." Directorate General of Regional Development, Ministry of Home Affairs.
>
> "Some of our disability friends are encountering difficulties to adjust with the online class during the pandemic." FORMASI Disabilitas.

List of responses and recovery programs

Table 7 showcases a comprehensive list of programs implemented by the Indonesian government in response to the COVID-19 pandemic. With the goal of mitigating its effects on communities, various national activities and programs were carried out. It is worth noting that many of these COVID-19 response and recovery programs were an extension of existing programs, leveraging existing data managed by the Ministry of

Table 7 *List of COVID-19 Responses and Recovery Programs in Indonesia*

NO.	Programs	Description	Target
1.	Free vaccine	Ministry of Health introduced Free Vaccine program in 2021 to accelerate COVID-19 vaccine rate, that was distributed to all area in Indonesia.	All eligible citizens
2.	Basic Food Card (Kartu Sembako)	Initially, the Basic Food Card program targets 18.8 million poor families to receive assistance worth IDR 200,000 per month for 14 months. During COVID-19, the beneficiaries received 10 kilograms of rice per month.	Registered citizen of the Basic Food Card
3.	Pre-employment card (Kartu Prakerja)	Introduced during COVID-19 pandemic, this program provides virtual training and cash assistance around IDR 600,000 per month in four months. Moreover, additional IDR 1,000,000 is given to participants who participate in the following-up survey.	Indonesian citizens who are looking for work or have been affected by layoffs during the COVID-19 pandemic.
4.	Internet Package Subsidy	Aimed at supporting education activities at home during the COVID-19 pandemic, 38.1 million students, university students, and teachers received an assistance of internet data.	students, university students, and teachers
5.	Financial assistance for street vendors, small shops, and small business owner	The Government of Indonesia provided a financial aid around 1,2 million IDR to street vendors, owners of small shop, and owners of small business to prevent the economic impacts of COVID-19 pandemic.	Street vendors, small shops, small business
6.	Direct Cash Assistance of Village Fund	The direct cash assistance was transferred to registered households in villages, in which each household received 300,000 IDR per month for 12 months.	Villagers registered as beneficiaries
7.	Social Cash Assistance	Each family received 300,000 IDR per month from January to June 2021 and 10 kilograms of rice from Public Company Logistics Affairs Agency during the COVID-19 pandemic.	Families registered as beneficiaries
8.	Social Cash Assistance proposed by district stakeholders	District stakeholders proposed non-registered families in the Social Cash Assistance program to receive 200,000 IDR per month from January to June 2021 and 10 kilograms of rice from Public Company Logistics Affairs Agency during the COVID-19 pandemic.	Non-registered families in the Social Cash Assistance and Basic Food Card beneficiaries
9.	Safety program	The Indonesian National Police provided incentive assistance of 600,000 IDR for three months to 197,000 beneficiaries.	Taxi, bus, truck, and assistant-bus drivers
10.	Subsidy of Electricity bills and abonnement	During COVID-19 pandemic, the State Electricity Company provided waivers and reduction for electricity bills for 450 VA and 900 VA customers.	450 VA and 900 VA customers
11.	Employment Intensive Program	The Indonesian Government provided fundings to increase the opening positions in all ministries and government institutions.	People who are looking for jobs.

Social Affairs to reach beneficiaries. The primary targets of these programs were vulnerable populations, including poor communities, laid-off employees, job seekers, and small business owners. Financial assistance was the main form of support provided, including direct cash transfers and food aid.

However, the implementation of these socioeconomic supports faced some challenges, such as inaccurate data leading to the missing of aid beneficiaries. For example, data on disability groups and the elderly did not always match the intended target group in the field, resulting in social assistance being missed by some groups. Additionally, accessibility issues faced by the disability community in accessing support and assistance further complicated implementation. Lastly, sustaining the program aimed at reducing socioeconomic disparities remains a challenge.

> *"The biggest challenge is how to make sure this social assistance well received by those who need."* Office of the Presidential Staff.

> *"Data of elderly people between regions are different. Therefore, the issues of elderly people between different regions cannot be equated. If we have accurate data, we can perform precise social assistance which is in accordance with the problem."* Emong Lansia.

The Indonesian government implemented a range of programs in response to the COVID-19 pandemic. Some programs were focused on the economic sector, while others were non-economic in nature. The latter category included teleconsultation services for people under quarantine, home visits by health workers, a vaccine priority program, internet data assistance, and the "Work from Bali" campaign, which aimed to mitigate the impact of the pandemic on the tourism sector.

> *"We identified many innovative programs that can be done by regional authorities. We promoted health worker home visit, in which they check pregnant women at home. We also promote a teleconsultation program to health workers in the local health centers before they do home visit."* National Team for the Acceleration of Poverty Reduction.

The free vaccine and internet package subsidy programs were distinct from the rest. The free vaccine program was a major response strategy aimed at preventing COVID-19 transmission across the entire population. The internet package subsidy program was deemed non-economic assistance as it aimed to support students' continued learning during quarantine. However, the disability community reported difficulties with the vaccine program, as they were not initially prioritized for COVID-19 vaccines. Through advocacy efforts, the disability community successfully secured vaccine priority for their group through a letter from the Indonesian president.

> *"At first, we are not a priority to receive vaccine. We then did advocacy to the policymakers and our president released a letter stating that people living*

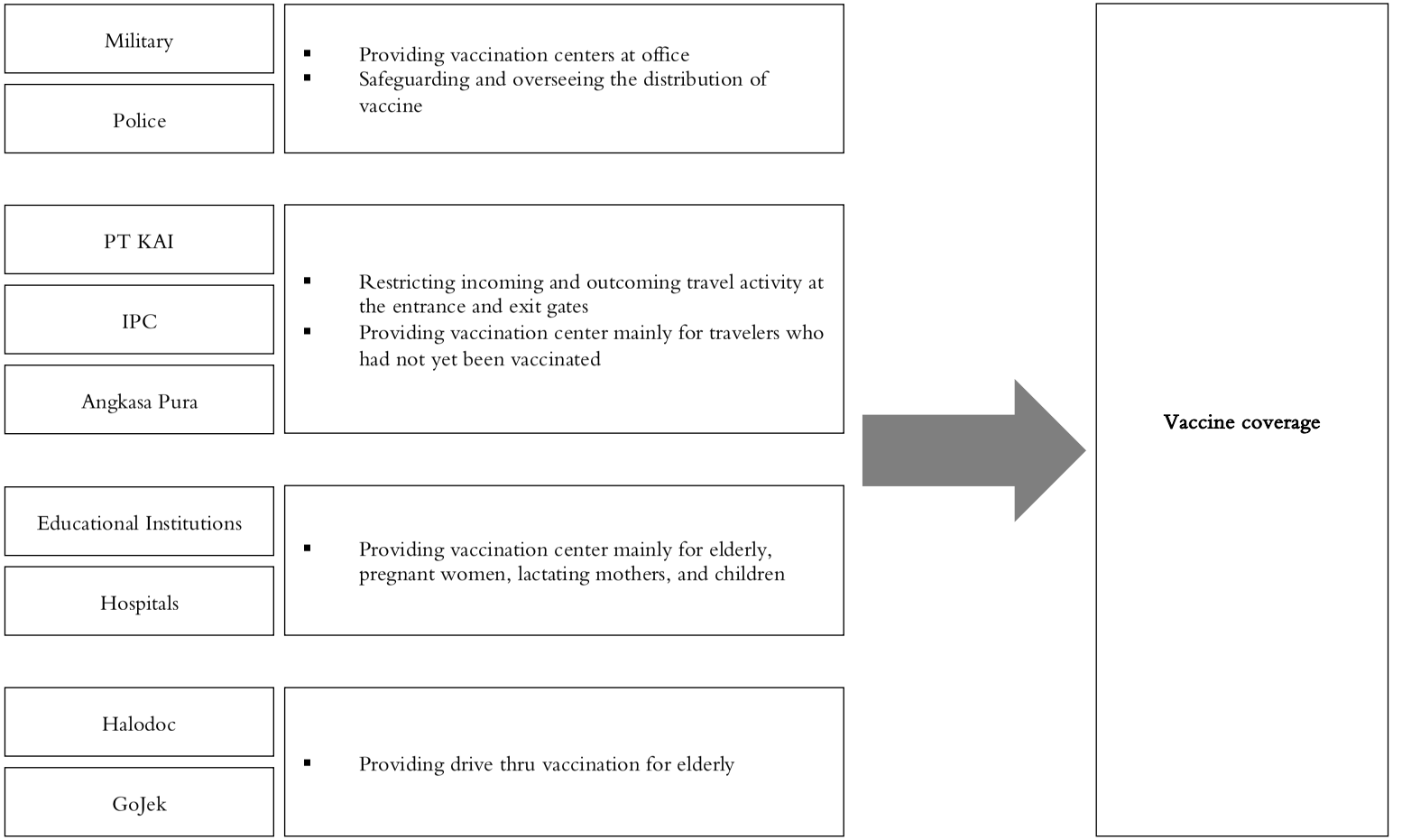

Figure 17 *Multisectoral collaboration to increase vaccine coverage in Indonesia*

with disability as a priority to receive vaccine along with elderly people." FORMASI Disabilitas.

Multi-sectoral collaboration in COVID-19 response and recovery

The Military and Police Department

In response to the COVID-19 pandemic, the Indonesian Ministry of Health enlisted the support of the Indonesian Military and Police Department to aid in contact tracing and to help accelerate the vaccination program across the country. According to the MoH website [23], over 13,500 police officers and 9,176 military members were prepared and trained. The Indonesian military deployed personnel and equipment to ensure equitable distribution of vaccines to all regions. Health facilities and buildings belonging to the Military and Police departments were temporarily transformed into vaccination centers to enhance vaccine coverage.

State-Owned Transportation Enterprises

Indonesia has increased travel restrictions to curb the spread of COVID-19, requiring travelers to either take a COVID-19 test or be fully vaccinated. State-Owned Enterprises databases [24-26] show that PT KAI (the Indonesian railway company), Angkasa Pura (the national airport management), and Indonesia Port Corporation (IPC) implemented travel restrictions and participated in the acceleration of the vaccination program. The Ministry of Transportation Circular Letter number 42 of 2021 mandated increased restrictions at entry and exit points, requiring travellers to present proof of vaccination or scan a barcode using the Peduli Lindungi app. Additionally, these state-owned transportation enterprises were required to provide vaccination centers at train stations, harbors, and airports, making the COVID-19 vaccine readily accessible to travelers and the general public.

Private Companies and Commercials

According to the official Gojek Website [27], the Indonesian Ministry of Health teamed up with Halodoc and GoJek to establish drive-thru vaccination centers for elderly residents in Jakarta. All aspects of the vaccination process were carried out within the vehicle to streamline the procedure and minimize transmission risks. To receive a vaccine through the drive-thru, elderly individuals were required to register with Halodoc, and GoJek arranged appointments through their app, which was integrated with the Halodoc system. Furthermore, GoJek provided transportation support to elderly participants who may have difficulty accessing transportation.

Educational Institutions

As indicated on the Ministry of Communication and Informatics website [28], educational institutions played a role in the COVID-19 vaccination program, working in collaboration with local and national hospitals to increase vaccine coverage. For instance, the Universitas Indonesia Alumni Association (ILUNI UI) partnered with the Indonesian Vertical Hospital Association (ARVI), an association of national hospitals managed by the Ministry of Health, to provide vaccines for the elderly, pregnant women, lactating mothers, and children.

The results of in-depth interviews revealed that the Indonesian government provided support to mitigate social issues in the health sector during the COVID-19 pandemic. This support included teleconsultation, home visits by health workers, credit aid for small business owners, pre-worker cards, a vaccine priority program, internet data for education, and the "Work from Bali" campaign to address economic concerns in the tourism sector.

> "We identify some innovative programs performed by sub-national governments, such as asking health cadre for a home-visit" National Team for the Acceleration of Poverty Reduction

DISCUSSION

4 DISCUSSION

Current state of SDH in Indonesia

The results of our study found that while progress has been made in Indonesia's Social Determinants of Health (SDH), disparities still exist and are particularly pronounced in rural and urban areas, wealth groups, geographical locations, and between provinces. The decentralized government system in place since 1998 may contribute to these disparities at the local level by granting more authority and autonomy to local stakeholders. This can lead to varying SDH outcomes across regions, as policies, programs, and development plans prioritize local issues. The gaps in SDH outcomes between wealth groups and type of residence demonstrate that the progress made

in Indonesia does not necessarily eliminate the inequities between the poor and rich, and those living in rural and urban areas.

Our findings show positive trends in SDH in Indonesia, particularly in terms of participation in social protection, representation of women in parliament, health expenditure, primary health care expenditure, and sanitation. These trends are likely to continue as long as Indonesia's political system remains stable and there is an increased focus on the health sector [32-35]. A good example of the benefits of a stable political system for the health sector can be seen in China, where a major health care reform was introduced in 2009. This reform aimed to provide equal access, financial protection, and well-structured infrastructure that simplified access to health care. The result was a significant improvement in the reduction of health inequalities and inequities in just a decade [36].

However, there was a decline in health promotion expenditure, which may result in slow progress in health promotion efforts in Indonesia. This could lead to an increased burden on healthcare due to the high burden of disease, as evidenced by the increasing primary health care expenditure. Research has shown a positive relationship between improved health promotion programs and reduced medical treatment costs, as effective prevention can benefit the health of the community [37]. To enhance health promotion outcomes, health promotion programs need to focus on promoting immunization, disease management, weight loss management, smoking cessation, screenings for

blood pressure and cholesterol, health risk assessment, and stress management [37].

Women's participation in social protection is also lower compared to men. Women's participation in health insurance is crucial, as they may require preventive measures such as blood pressure checks, especially during pregnancy, Pap tests, and mammograms [38]. Maternal healthcare is also critical for the health of mothers during pregnancy and after delivery [39-41]. If Indonesian women's participation in social insurance remains low, it could negatively impact maternal and child health.

Major Actions in addressing determinants of health

The major challenge in addressing the social determinants of health (SDH) in Indonesia lies in the limited understanding of the SDH concept by policy makers. Despite the fact that SDH has not been widely recognized, there is scarce evidence of its integration into national policies or multisector collaboration programs in the country. Additionally, many government organizations tend to focus solely on their own responsibilities and mandates, leading to a high level of sectoral ego among them. A study by Ramadani et al. (2022) highlights sectoral ego among stakeholders as a common hindrance to policy implementation in Indonesia [42]. According to Charles et al. (2019), social health issues were previously managed by a specific directorate within the Ministry of Health. However, due to ineffective implementation, this directorate was eventually removed from the structure. This aligns with the results

of our study, which did not identify a specific government body responsible for coordinating SDH issues in Indonesia.

Indonesia has signed and ratified numerous international treaties and conventions that aim to protect human rights. Issues of human rights are not new to Indonesia because efforts to protect human rights are mandated by the Indonesian National Indonesia plays an active role in global diplomacy, having ratified and signed numerous international treaties and conventions that aim to protect human rights. The protection of human rights is a mandate of the Indonesian National Constitution of 1945, and the country participates in international forums that promote human rights. Despite this, instances of stigma and discrimination still exist at the community level, such as the negative attitude shown by some health workers towards people living with HIV. Fauk et al. (2021) found that misunderstandings about HIV, personal and religious beliefs, and cultural values and norms contribute to this stigma [44]. Therefore, it is important to provide training to reduce stigma and discrimination among health workers. The Indonesian Ministry of Foreign Affairs is responsible for representing Indonesia in international forums [45], including playing a role in global COVID-19 vaccine diplomacy [46–49]. However, the lack of involvement from the health sector highlights the need to strengthen the country's global health diplomacy capacity.

Indonesia has adopted several national regulations to align with global conventions and treaties, with a focus on promoting equity and equality in various sectors. However, the country seems to prioritize economic development, as the majority of national regulations related to equity and ratified international treaties are centered on the economic sector. Despite showing promising economic growth, there remains a significant disparity between the east and west regions of Indonesia [50, 51]. As a member of the G20, a multilateral platform comprised of developed and emerging economies representing over

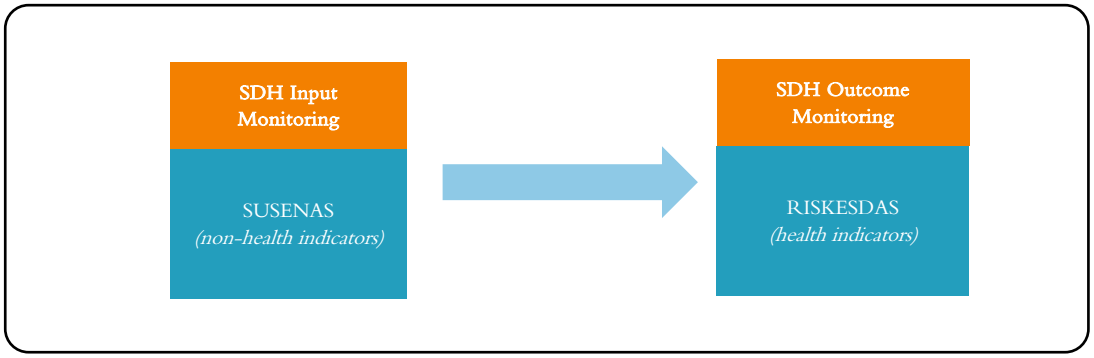

Figure 18 *The proposed monitoring scheme to oversee SDH in Indonesia using ecological study approach*

80% of world GDP and managing 75% of international trade [52, 53], eliminating domestic economic disparities is thus a priority for Indonesia in its role as a key player in the international economic forum.

In Indonesia, several national regulations have been established to protect the rights of children and to eliminate discrimination based on gender, race, religion, political opinion, and disability status. Indonesia is renowned for its large population, consisting of 270 million people, with 1,340 recognized ethnic groups and about 700 acknowledged local languages [20, 54, 55]. These ethnic differences often lead to inter-ethnic conflicts, caused by cultural clashes, different interests, or diverse political economies [56]. Although such conflicts only account for 8% of the total, they have a significant impact on local economic stability, infrastructure damage, and security [57]. Moreover, these conflicts may hinder progress in the Social Determinants of Health (SDH) due to the significant disruptions they cause.

Our findings show that community participation in policy making varies among different groups. For example, the HIV/AIDS community has a long history of frequent participation in policy making, while the participation of the disability community remains low, despite advocacy efforts. However, the increasing capacity of many Indonesian disability associations at the national and local level has led to the inclusion of disability issues in policy making [58]. This may serve as an example for other vulnerable and neglected groups, and training to enhance the individual capacity of these groups may be required.

Monitoring system in Indonesia

Some government institutions in Indonesia keep records on SDH, but there is no specific entity tasked with monitoring it. This is due to two reasons. Firstly, SDH is not yet widely recognized in Indonesia. Secondly, there is a lack of coordination between government agencies to address social and economic disparities. Despite this, the monitoring of such disparities is being carried out through established systems, tools, and protocols. The current system for monitoring inequalities in Indonesia aims to provide data and insights for policymaking, the development of national and local programs, and promoting equity [22]. As a result, the establishment of a dedicated SDH monitoring system in Indonesia can be explored by examining existing data sources that track SDH-related indicators. Our informants suggest that collaboration in monitoring and surveillance of SDH is necessary as different government agencies hold different data and responsibilities. This collaboration could help

to eliminate any overlap in information from multiple sources.

Data sources indicated the presence of SDH indicators across various domains, but a dedicated institution for monitoring SDH was not found. The Indonesian national survey, SUSENAS, stood out for its comprehensive coverage of both socio-economic and non-socio-economic aspects, including education, health, nutrition, housing, household assets, culture, household income and expenditure, sanitation, travel, and wealth level. Conversely, the health-focused surveys, RISKESDAS and SDKI, did not include these non-socio-economic aspects. Despite its recent introduction, DTKS only focused on social protection and poverty, which was already covered by SUSENAS. Its primary purpose was to determine the population eligible for cash assistance, government aid, and cash contributions for social protection, hence its SDH indicators were limited.

SUSENAS, RISKESDAS, DTKS, and SDKI are considered to be exceptional due to their large sample sizes and the representativeness of all regions in Indonesia, as well as their ability to sustainably collect data. While IFLS was only conducted in 13 provinces, the data collected may not accurately represent the entire country. Despite this, IFLS still has its advantages, as it was conducted using a longitudinal study design, making it best suited for surveillance purposes. On the other hand, SUSENAS, RISKESDAS, DTKS, and SDKI used a cross-sectional study design with a multi-stage sampling approach to represent the district-level population. SUSENAS is the only survey that is conducted annually, while the others are conducted periodically.

To determine the most suitable survey for monitoring SDH progress in Indonesia, several critical factors were taken into account. The selection of relevant indicators, data collection sustainability, representativeness of the entire population, analysis of inequalities among sub-groups, and the platform used to present results were considered as the standards. SUSENAS met most of the standards and inclusion criteria, including having a well-established data collection system and a platform for presenting

the results that is easily accessible to the public. However, it should be noted that the SUSENAS dataset can be quite expensive for the general public to access, but arrangements can be made with the Central Statistics Bureau for institutions to obtain free access to the dataset. Additionally, RISKESDAS is also considered a viable option for monitoring SDH progress in Indonesia, as it provides a means to assess progress by evaluating the health status through achievements or outputs.

Several barriers have been reported in the monitoring and surveillance of SDH, including the use of different data sources, limited access, and inadequate measurement tools. The absence of a government agency solely dedicated to SDH surveillance is a key challenge. As a result, data on social inequalities and health disparities are fragmented and inconsistent, due to the involvement of different government bodies in data collection. This fragmentation may be exacerbated by sectoral interests and self-centered organizations. To address these issues, it is suggested that a central government body with specific authority be established to lead the monitoring and surveillance of SDH data. Some respondents have also reported difficulties in accessing data for research purposes. This may result in underreporting and inadequate examination of SDH conditions, social disparities, and inequalities. To improve data accessibility and reduce differences and overlaps, it is recommended to have a single data source. Additionally, the national surveys currently conducted in Indonesia may not accurately measure disability, as they do not capture the diverse types and spectrums of disability. To address this, the adoption of peer-reviewed protocols for disability measurement should be included in national surveys. Another obstacle in SDH monitoring is the shortage of monitoring staff. The establishment of a dedicated government body to monitor SDH may help to increase the frequency and capacity of monitoring staff.

Impacts of COVID-19 on SDH

The COVID-19 pandemic has had a notable impact on several social determinants of health (SDH) indicators in 2020. Despite the trend showing improvement in some indicators after the initial surge, there was a noticeable increase in employment rate, a moderate increase in poverty, a decline in the proportion of people who participate in the National Health Insurance (JKN) from wealthier communities, and a decrease in early education participation. The pandemic has resulted in a widespread economic loss globally, affecting employment, industry, and commerce [59, 60]. The termination of work in Indonesia as reported by Fajar et al (2020) has led to a rise in unemployment during the pandemic, leading to an increase in poverty levels [61]. This, in turn, has reduced the participation in the JKN among wealthier communities. Physical distancing restrictions during the pandemic resulted in the majority of teaching and learning activities being conducted online, causing a decline in early education participation. This is because face-to-face teaching was prohibited, and many parents were concerned about the potential transmission of the virus if their children attended schools [62, 63].

The COVID-19 pandemic has brought about significant changes in the health sector in Indonesia. While overall health expenditure has increased, the budget for health promotion has experienced a decline. This shift in spending has been attributed to the need for strengthening the health system in response to the pandemic, as well as providing incentives for health workers who are facing an increased workload [64, 65]. However, this shift in focus has resulted in a reduction of resources dedicated to health promotion initiatives. The impacts of the pandemic have also been felt by vulnerable groups such as the HIV/AIDS community, the elderly, and those with disabilities, who have faced difficulties accessing healthcare during the outbreak. Despite this, the effects of COVID-19 on children and adolescents have been

under-reported, highlighting the need for greater involvement from child commissions to gain a more comprehensive understanding of the pandemic's impacts and inform future preventive measures.

The COVID-19 pandemic has had a significant impact on various communities, including those affected by HIV/AIDS, the elderly, and those with disabilities. Our study found that these groups have faced difficulties in accessing healthcare facilities during the pandemic. While the effects of COVID-19 are widely documented among adults, the impacts on children and adolescents are underreported. To have a comprehensive understanding of the effects of COVID-19, it is essential to involve child commissions to gather information and develop effective preventive measures.

Responses and recovery of COVID-19

To mitigate the impacts of COVID-19, the Indonesian government has taken various recovery measures, primarily focusing on vaccine coverage through multisector collaboration. The aim is to prevent the economy from suffering catastrophic impacts by providing financial aid and assistance to the communities. However, the early stages of the COVID-19 vaccination program saw a slow uptake, with low vaccine coverage [66]. This was compounded by the fact that the disability communities reported that they were not a priority when it came to accessing vaccines, further limiting their ability to get vaccinated. The vaccine coverage

was primarily limited to the provinces of Jakarta, Bali, Riau Islands, and Yogyakarta, with coverage rates above 50% [67]. According to a study by the Indonesian Statistics Bureau (2022), major factors contributing to the low coverage included individuals having certain health conditions or being pregnant, difficulty accessing vaccine centers, waiting for available vaccine quotas and appointments, and worries about side effects [68]. To boost coverage, multisectoral strategies were introduced, engaging industry, private companies, state-owned enterprises, local governments, and other non-health sectors [66].

As a result of this increased collaboration, a study by Arifin and Anas (2021) estimated that vaccine coverage increased by up to 600% within a few months [66]. As the COVID-19 pandemic impacted economic activities, the Indonesian government responded by providing non-financial and financial aid and assistance to affected groups such as those who lost their jobs, poor communities, and job seekers. The declining import and export trend resulted in low productivity for manufacturers and industries, as noted by Tambunan (2021). According to a report by the Indonesian Statistics Bureau (2021), the volume of exports at major ports decreased by approximately 13% from 654 million tons in 2019 to 579 tons in 2021. The Indonesian economy experienced a 2% decline in comparison to 2019, with transportation and goods being the hardest hit at a 15% decrease [70]. The COVID-19 pandemic significantly impacted Indonesia's tourism industry, including aviation, travel, accommodation, lodging, and culinary [71]. Approximately 150,000 people working in the tourism sector lost their jobs due to unoccupied lodgings, low profits in aviation, and travel restrictions [71]. This resulted in an increase in poverty levels, as many employees were terminated, their wages were cut, and tourism businesses were closed [71].

However, our findings have revealed several obstacles and challenges in the response and recovery efforts to COVID-19 in Indonesia. Firstly, inaccurate data has led to unequal distribution of social aid. It is imperative for Indonesia to enhance its system and human resources for data monitoring and to create a unified data access system through multi-sectoral collaboration. Secondly, the disability communities face difficulties in accessing social aid. This challenge could be addressed by providing disability-friendly transportation options or implementing transportation incentives. Thirdly, there is a reluctance towards response and recovery programs due to concerns about the sustainability of social assistance, which could result in further exacerbation of social disparities. To address this, it is crucial to establish a national policy or guidelines to guide future action plans.

Limitations and strengths of the study

This report was carried out using three approaches: an analysis of secondary data to demonstrate the state of SDH indicators and the existing monitoring system for SDH inequities, a collection of policy documents related to the implementation of the SDH program in Indonesia, and in-depth interviews with policymakers and beneficiaries of the SDH program at the central level. There are a few limitations to the methods used in this study. Firstly, some of the available data lacked the specific information the researcher desired, leading to limited access to the datasets that would have been ideal for this research. For example, much of the data only provided overall proportions and was not detailed enough to define the desired geographic region, which meant that spatial analysis could not be fully performed for the secondary data

analysis. Secondly, some policy document sources were unavailable or poorly managed, and so the research team relied on online publications managed by relevant authorities to document the COVID-19 response and recovery carried out by the Indonesian government. Finally, as the study was focused on the progress of SDH at the country level and federal government, in-depth interviews were not conducted with informants at the district/city level who may have been able to provide more comprehensive information. This may overlook the potential for exploring the dissemination of information along vertical channels.

However, this study boasts a unique strength as it is the first and currently the only one that focuses on SDH in Indonesia. The mixed method approach utilized in this report offers a comprehensive analysis and balances out the limitations of single method, providing a more nuanced understanding of the subject. As a result, this study is able to address unanswered patterns and insights that may not be uncovered through a single method. The mixed methodology enhances the validity and reliability of data gathered from multiple sources.

IMPLICATIONS

5 IMPLICATIONS

National governance

Our findings indicate that the concept of Social Determinants of Health (SDH) is not widely recognized by policymakers and beneficiaries in Indonesia. As a result, health is not given adequate consideration in the policy-making process. It is crucial to promote SDH and use the local term in Indonesia (i.e., Determinan Sosial Kesehatan or DSK) as this will make it easier for people to understand and remember.

To start, the promotion and dissemination of SDH should target policymakers, aiming to raise awareness about the impact of non-medical factors on health outcomes in the country, and to narrowing the disparities in health outcomes. Promoting the concept of SDH to policymakers and its significance in addressing health inequities can be performed through workshops, seminars, and training sessions. Moreover, utilizing various communication channels managed by the vocal point of SDH, including media outlets, is suggested to disseminate information and raise awareness about the SDH approach and its benefits. Developing policy briefs and position papers may highlight the importance of SDH approach and provide recommendations for its implementation.

Furthermore, building partnerships with relevant organizations, including public health organizations, advocacy groups, and community-based organizations may promote the SDH approach and increase its visibility among policymakers. It is recommended to map and strengthen the capacity of policymakers who have the potential and authority to promote SDH, in order to build a network that supports this cause. Most participants recommend that the Coordinating Ministry for Human Development and Cultural Affairs should lead SDH initiatives.

The "Health in All Policies" approach is more likely to be successful if the national governance is aware of the importance of SDH to reduce health disparities in Indonesia.

Participation

Public participation in the policymaking process indicates a progressive trend although some challenges were observed. Enhancing public participation, particularly among vulnerable communities, in the policymaking process is crucial for effective decision-making. To increase involvement, various communication channels such as town hall meetings, social media, and online platforms can be leveraged to reach a diverse community and increase engagement. Representation of vulnerable communities can be ensured by appointing members from these groups, especially those who are not represented, to participate in decision-making bodies. To foster collaboration and build a sense of ownership, partnerships between government agencies, community-based organizations, and local leaders can be promoted. Providing training and support to vulnerable communities, to help them understand the policymaking process, is another recommendation. It is essential to ensure that information about the policymaking process is easily accessible and comprehensible to all community members, including vulnerable communities.

Health sector orientation

Our study identified three major barriers in the healthcare sector that correspond to SDH, including limited access to healthcare, low empathy among health workers, and insufficient leadership from the health sector. Recommendations have been made for each of these barriers. To increase access to

healthcare, the Ministry of Public Works and Housing should improve and build infrastructure, involve private clinics in the National Health Insurance scheme, provide incentives for public transportation in areas with limited access, introduce mobile health facilities to reach rural communities, and initiate a frequent healthcare visiting program for households in rural settings. To address low empathy among health workers, it is crucial to improve their communication abilities and express empathy towards patients, which will increase patient comfort levels and reduce hesitation to seek healthcare. Health communication training can help improve empathy and reduce stigma among health workers. Finally, to address the lack of leadership from the health sector in SDH, it is important to build capacity and enhance understanding and implementation of health promotion agenda. The health sector needs to take a more active role in SDH to promote better and equal health outcomes in the country.

Global Governance

This work highlights two significant weaknesses in global governance as faced by Indonesia. Firstly, despite ratifying major international treaties related to basic human rights, there is a lack of effective top-down communication that hinders information dissemination. To improve this, it is recommended to adopt more efficient methods of communication such as through social media, mass media, channels managed by government institutions, circular letters or regulations. Providing access to information and resources on accessible platforms and

sources can help relevant authorities and public stay informed about current trends and developments in global issues.

Secondly, the Indonesian government needs to strengthen its global health diplomacy as the current capacity is insufficient. The government needs to consider global issues affecting health outcomes among Indonesians such as international tourism, migrant workers, and refugees. Providing training and professional development opportunities can help health sector professionals acquire the necessary skills and knowledge in global diplomacy and recent global health issues. This can include courses, workshops, and seminars on relevant topics, as well as opportunities to work with experts in the field. To increase networking opportunities, encouraging health sector professionals to attend international conferences and events can help them connect with other professionals in the field and increase their knowledge of global issues.

Partnering with global health organizations can help the health sector build capacity and increase their understanding of global health issues, particularly through collaborations with global health organizations. This can include collaboration on research, advocacy, and capacity building initiatives. Mentorship programs can provide health sector professionals with the opportunity to work with experienced practitioners in the field,

learn from their experience, and develop the skills and knowledge they need to succeed in global health.

Monitoring and Accountability

Our findings showed a weak monitoring and accountability system for tracking SDH progress in Indonesia, despite several surveys indicating the socioeconomic disparities at the district level in Indonesia. To address this concern, we recommend five constructive measures. Firstly, the lack of longitudinal data surveys hampers the monitoring of health disparities as the current data cannot capture changes over time accurately from the same cases. Longitudinal data collected contemporarily instead of retrospectively eliminates issues of bias from false or selective memory that often occurs in cross-sectional surveys. We recommend the Badan Pusat Statistik (BPS) who have just started collecting longitudinal data to include SDH indicators to monitor SDH progress in Indonesia. Secondly, access to some datasets is limited as they are expensive for the public to use, limiting studies on SDH progress in Indonesia.

We recommend collaboration between data centers and research universities to encourage SDH studies with available and free data. The monitoring system can benefit from partnerships with academic institutions, non-

profit organizations, and other relevant stakeholders. These collaborations can help to collect and analyze data, and raise awareness about health disparities and inequalities.

Thirdly, Indonesia does not have an institution specifically for SDH monitoring, thus developing a One Data policy and appointing a research institution to manage SDH monitoring is strongly recommended. The monitoring system needs to have trained and skilled personnel to collect and analyze data and to disseminate information effectively. Providing training and capacity building opportunities can enhance the monitoring system's ability to monitor health disparities and inequalities.

Fourth, some instruments have irrelevant questions to identify vulnerable groups, thus relevant questions need to be adapted from peer-reviewed instruments. Developing standardized data collection tools and methods can help in collecting comparable data across different regions and time periods, which is crucial for monitoring disparities and inequalities.

Lastly, the monitoring system must communicate the results of its work effectively to relevant stakeholders, including policymakers, the public, and communities. Improving communication strategies, such as through the use of social media, can help to raise awareness and encourage action on health disparities and inequalities.

REFERENCES

1. Baciu A, Negussie Y, Geller A, Weinstein JN, National Academies of Sciences E, Medicine. The root causes of health inequity. Communities in action: Pathways to health equity: National Academies Press (US); 2017.
2. Johnstone M-J, Kanitsaki O. Ethnic aged discrimination and disparities in health and social care: A question of social justice. Australasian Journal on Ageing. 2008;27(3):110-5.
3. Adler NE, Newman K. Socioeconomic Disparities In Health: Pathways And Policies. Health Affairs. 2002;21(2):60-76.
4. World Health Organization. Improving equity in health by addressing social determinants. Geneva: WHO; 2011.
5. Short SE, Mollborn S. Social determinants and health behaviors: conceptual frames and empirical advances. Current opinion in psychology. 2015;5:78-84.
6. Raphael D. Social determinants of health: Canadian perspectives: Canadian Scholars' Press; 2009.
7. Organization WH. World health statistics 2010: World Health Organization; 2010.
8. Lawn JE, Blencowe H, Oza S, You D, Lee ACC, Waiswa P, et al. Every Newborn: progress, priorities, and potential beyond survival. The Lancet. 2014;384(9938):189-205.
9. Nababan HY, Hasan M, Marthias T, Dhital R, Rahman A, Anwar I. Trends and inequities in use of maternal health care services in Indonesia, 1986-2012. Int J Womens Health. 2017;10:11-24.
10. Laksono AD, Wulandari RD, Soedirham O. Regional disparities of health center utilization in rural Indonesia. Malaysian Journal of Public Health Medicine. 2019;19(1):158-66.
11. Syachroni SS, Syarifah U, Kom S, Yulianto A. RISET KESEHATAN DASAR. 2013.
12. Health Mo, Research NIoH, Development. National report on basic health research, Riskesdas, 2013. 2018.
13. International Monetary Fund. World Economy Outlook Update: Fault Lines Widen in the Global Recovery. Washington DC; 2021.
14. Badan Pusat Statistik Indonesia. Pertumbuhan Ekonomi Indonesia Triwulan II-2021. Jakarta; 2021 5 Agustus 2021.
15. Badan Pusat Statistik Indonesia. Februari 2021: Tingkat Pengangguran Terbuka (TPT) sebesar 6,26 persen. Jakarta; 2021 5 Agustus 2021.
16. Rivany R. Quo Vadis Undang-Undang Sistem Jaminan Sosial nasional. Jurnal Manajemen Pelayanan Kesehatan. 2010;13(3):111.
17. Mboi N. Indonesia: On the Way to Universal Health Care. Health Systems & Reform. 2015;1(2):91-7.
18. Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T, Harimurti P, et al. The Republic of Indonesia health system review. 2017.
19. Barros A, Boutayeb A, Brown C, Dean HD, Di Ruggiero E, Ferrelli RM, et al. Towards a global monitoring system for implementing the Rio Political Declaration on Social Determinants of Health: developing a core set of indicators for government action on the social determinants of health to improve health equity. International Journal for Equity in Health. 2018;17(1):136.
20. Indonesian Statistics Bureau. Statistics Indonesia Jakarta: Badan Pusat Statistik; 2022 [Available from: https://www.bps.go.id/.
21. National Institute of Health Research and Development. Laporan Hasil Riset Kesehatan Dasar (RISKESDAS): Ministry of Health; 2022 [Available from: https://www.litbang.kemkes.go.id/laporan-riset-kesehatan-dasar-riskesdas/.
22. Ministry of National Development Planning. Sistem Informasi dan Manajemen Data Dasar Regional 2022 [Available from: https://simreg.bappenas.go.id/.
23. Ministry of Health. Polri Dukung Pemerintah Dalam Melaksanakan Tracing dan Vaksinasi COVID-19 (English: The Indonesian Police Support The Indonesian Government in Tracing and Vaccination of COVID-19) Jakarta: Ministry of Health; 2021 [Available from: https://www.kemkes.go.id/article/view/21021100003/polri-dukung-pemerintah-dalam-melaksanakan-tracing-dan-vaksinasi-covid-19.html.
24. State-Owned Enterprises. 13 Stasiun Layani Vaksinasi COVID-19 Gratis bagi Pelanggan KAI (English: 13 Train Stations Provide Free COVID-19 Vaccination for Customers) Jakarta: Badan Usaha Milik Negara; 2021 [Available from: https://bumn.go.id/post/13-stasiun-layani-vaksinasi-covid-19-gratis-bagi-pelanggan-kai.
25. State-Owned Enterprises. Mitra Kerja Pelabuhan Tanjung Perak Jalani Vaksinasi COVID-19 (English: Tanjung Perak Port Partners Undergo COVID-19 Vaccination) Jakarta: Badan Usaha Milik Negara; 2021 [Available from: https://bumn.go.id/media/news/detail/mitra-kerja-pelabuhan-tanjung-perak-jalani-vaksinasi-covid-19.
26. State-Owned Enterprises. AP I Hadirkan Sentra Vaksinasi di 15 Bandara(English: AP I Presents Vaccination Centers at 15 Airports) Jakarta: Badan Usaha Milik Negara; 2021 [Available from: https://bumn.go.id/post/per-5-juli-ap-i-hadirkan-sentra-vaksinasi-di-15-bandara.
27. Gojek. Jadi Mitra Kemenkes RI, Halodoc dan Gojek Hadirkan Pos Pelayanan Vaksinasi COVID-19 (English: Becoming Ministry of Health Partner, Halodoc and Gojek Introduce COVID-19 Vaccination Service Post: GoJek; 2021 [Available from: https://www.gojek.com/blog/gojek/vaksinasi-covid-19/.
28. Informatics MoCa. Pemerintah Percepat Pemberian Vaksinasi COVID-19 Kepada Masyarakat (English: Government Accerelate the Provision of COVID-19 Vaccination to the Community) Jakarta2021 [Available from: https://www.kominfo.go.id/content/detail/36942/pemerintah-percepat-pemberian-vaksinasi-covid-19-kepada-masyarakat/0/berita.
29. Aritenang A. A study on Indonesia regions disparity: post decentralization. Available at SSRN 1737977. 2008.
30. Pepinsky TB, Wihardja MM. Decentralization and Economic Performance in Indonesia. Journal of East Asian Studies. 2011;11(3):337-71.
31. Santos-Marquez F, Gunawan AB, Mendez C. Regional income disparities, distributional convergence, and spatial effects: evidence from Indonesian regions 2010–2017. GeoJournal. 2022;87(3):2373-91.
32. Mietzner M. Rival populisms and the democratic crisis in Indonesia: chauvinists, Islamists and technocrats. Australian Journal of International Affairs. 2020;74(4):420-38.
33. Mauk M. Stable Support for Democracy in East and Southeast Asia? Examining Citizens' Trust in Democratic Institutions. East Asia. 2022;39(3):239-57.
34. Datta A, Jones H, Febriany V, Harris D, Dewi RK, Wild L, et al. The political economy of policy-making in Indonesia. Overseas Development Institute (ODI), London, UK. 2011.
35. Senkubuge F, Modisenyane M, Bishaw T. Strengthening health systems by health sector reforms. Global Health Action. 2014;7(1):23568.
36. Yip W, Fu H, Chen AT, Zhai T, Jian W, Xu R, et al. 10 years of health-care reform in China: progress and gaps in universal health coverage. The Lancet. 2019;394(10204):1192-204.

37. Dursi MC. Can Health Promotion Programs Effectively Reduce Health Care Costs, Increase Productivity and Retain Qualified Employees? 2008.
38. Kaiser Family Foundation. Women's Health Insurance Coverage San Fransisco: KFF; 2021 [Available from: https://www.kff.org/womens-health-policy/fact-sheet/womens-health-insurance-coverage/.
39. Wang W, Temsah G, Mallick L. The impact of health insurance on maternal health care utilization: evidence from Ghana, Indonesia and Rwanda. Health Policy and Planning. 2017;32(3):366-75.
40. Long Q, Zhang T, Xu L, Tang S, Hemminki E. Utilisation of maternal health care in western rural China under a new rural health insurance system (New Co-operative Medical System). Tropical Medicine & International Health. 2010;15(10):1210-7.
41. Twum P, Qi J, Aurelie KK, Xu L. Effectiveness of a free maternal healthcare programme under the National Health Insurance Scheme on skilled care: evidence from a cross-sectional study in two districts in Ghana. BMJ Open. 2018;8(11):e022614.
42. Ramadani L, Yovadiani A, Dewi F. When innocence is no protection: governance failure of digitization and its impact on local level implementation. Transforming Government: People, Process and Policy. 2022;16(1):68-80.
43. Surjadi C, Ismoyowati Sunyoto M, Djarir H. Determinan Sosial Kesehatan: Panduan Belajar Sendiri: Penerbit Universitas katolik Indonesia Atma Jaya Jakarta; 2019.
44. Fauk NK, Ward PR, Hawke K, Mwanri L. HIV Stigma and Discrimination: Perspectives and Personal Experiences of Healthcare Providers in Yogyakarta and Belu, Indonesia. Frontiers in Medicine. 2021;8.
45. Ministry of Foreign Affairs. Indonesia and Human Rights Protection Jakarta: Ministry of Foreign Affairs; 2019 [Available from: https://kemlu.go.id/portal/en/read/97/halaman_list_lainnya/indonesia-and-human-rights.
46. Firdaus AY. Multi-Track Diplomacy as Indonesia's Strategy in Mitigating The COVID-19 Pandemic. Journal of Social Political Sciences. 2020;1(3):168-77.
47. Setiawan A, Affianty D, Tanjung NF. INDONESIA'S GLOBAL HEALTH DIPLOMACY IN THE TIME OF COVID-19 PANDEMIC. Journal of Social Political Sciences. 2022;3(2):133-53.
48. Yuliantoro NR. The Politics of Vaccine Diplomacy and Sino-Indonesian Relations. Global Strategis. 2022;16(1):127-46.
49. Ministry of Foreign Affairs. Health Diplomacy and Vaccine Diplomacy Jakarta: Ministry of Foreign Affairs; 2022 [Available from: https://pptm.kemlu.go.id/en/diplomacy-2020/health-and-vaccine.
50. Qibthiyyah RM. Provinces and local government revenues structures and intra-province economic disparity. Economics and Finance in Indonesia. 2018;63(1):81-96.
51. Resosudarmo BP, Vidyattama Y. Regional income disparity in Indonesia: A panel data analysis. ASEAN Economic Bulletin. 2006:31-44.
52. Cooper AF, Thakur R. The group of twenty (G20): Routledge; 2013.
53. Cournède B, Denk O. Finance and economic growth in OECD and G20 countries. Available at SSRN 2649935. 2015.
54. Utomo A, McDonald P. Who marries whom?: Ethnicity and marriage pairing patterns in Indonesia. Asian Population Studies. 2016;12(1):28-49.
55. Aji AF, Winata GI, Koto F, Cahyawijaya S, Romadhony A, Mahendra R, et al. One Country, 700+ Languages: NLP Challenges for Underrepresented Languages and Dialects in Indonesia. arXiv preprint arXiv:220313357. 2022.
56. Sukandar R. Negotiating post-conflict communication: a case of ethnic conflict in Indonesia: Ohio University; 2007.
57. Barron P, Kaiser K, Pradhan M. Local conflict in Indonesia: Measuring incidence and identifying patterns: World Bank Publications; 2004.
58. Villeneuve M, Robinson A, Pertiwi PP, Kilham S, Llewellyn G. The Role and Capacity of Disabled People's Organisations (DPOs) as Policy Advocates for Disability Inclusive DRR in Indonesia. In: Djalante R, Garschagen M, Thomalla F, Shaw R, editors. Disaster Risk Reduction in Indonesia: Progress, Challenges, and Issues. Cham: Springer International Publishing; 2017. p. 335-56.
59. Ozili PK, Arun T. Spillover of COVID-19: impact on the Global Economy. Managing Inflation and Supply Chain Disruptions in the Global Economy: IGI Global; 2023. p. 41-61.
60. Blustein DL, Duffy R, Ferreira JA, Cohen-Scali V, Cinamon RG, Allan BA. Unemployment in the time of COVID-19: A research agenda. Journal of Vocational Behavior. 2020;119:103436.
61. Fajar M, Prasetyo OR, Nonalisa S, Wahyudi W. Forecasting unemployment rate in the time of COVID-19 pandemic using Google trends data (case of Indonesia). 2020.
62. Solekhah H. Distance learning of Indonesian early childhood education (PAUD) during the COVID-19 Pandemic. International Journal of Emerging Issues in Early Childhood Education. 2020;2(2):105-15.
63. Nuryati N, Insyira YI, Muawanah U. Teachers Have Problems Teaching Early Children During the Covid-19 Pandemic. Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini. 2022;6(5):4608-19.
64. Setiawati Y, Wahyuhadi J, Joestandari F, Maramis MM, Atika A. Anxiety and Resilience of Healthcare Workers During COVID-19 Pandemic in Indonesia. J Multidiscip Healthc. 2021;14:1-8.
65. Sunjaya DK, Herawati DMD, Siregar AYM. Depressive, anxiety, and burnout symptoms on health care personnel at a month after COVID-19 outbreak in Indonesia. BMC Public Health. 2021;21(1):227.
66. Arifin B, Anas T. Lessons learned from COVID-19 vaccination in Indonesia: experiences, challenges, and opportunities. Human Vaccines & Immunotherapeutics. 2021;17(11):3898-906.
67. Ministry of Finance. Menjawab Tantangan Peningkatan Cakupan Vaksinasi COVID-19 (English: Addresing Challenges of COVID-19 Vaccine Coverage) Jakarta: Ministry of Finance; 2021 [Available from: https://anggaran.kemenkeu.go.id/in/post/menjawab-tantangan-peningkatan-cakupan-vaksinasi-covid-19.
68. Indonesian Statistics Bureau. Survei COVID-19 Badan Pusat Statistik Jakarta: Badan Pusat Statistik; 2022 [Available from: https://covid-19.bps.go.id/.
69. Indonesian Statistics Bureau. Volume of Exports by Major Ports (Net weight: thousand tons), 1996-2021 Jakarta: BPS; 2021 [Available from: https://www.bps.go.id/statictable/2014/09/08/1007/volume-ekspor-menurut-pelabuhan-utama-berat-bersih-ribu-ton-1996-2021.html.
70. Indonesian Statistics Bureau. Pertumbuhan Ekonomi Indonesia Triwulan IV-2020 No. 13/02/Th. XXIV, 5 Februari 2021. Jakarta: BPS; 2021.
71. Alam MM, Fawzi AM, Islam MM, Said J. Impacts of COVID-19 pandemic on national security issues: Indonesia as a case study. Security Journal. 2021.

APPENDIX

APPENDIX 1

Questions for in-depth interview

SOCIAL DETERMINANTS OF HEALTH

1. What do you know about the social factors (education, income, etc.) that affect health?
2. What are the challenges and barriers in implementing this concept (Social Determinants of Health) in Indonesia?

GOVERNMENT AND CROSS-SECTOR

1. Is health issue also considered as a basis in formulating a policy in Indonesia?
2. To what extent is your institution involved in the formulation of health-oriented policies?
3. What are the challenges and barriers in implementing these policies?

PARTICIPATION

1. How is community involvement (disability groups, gender, elderly, marginalized) in the process of making health-oriented policies?
2. What are the challenges and barriers in involving these groups?

HEALTH SECTOR ORIENTED

1. So far, who/what Ministry/State institution coordinates (leads) the social disparity issues in health sector in Indonesia?
2. To what extent are your insitution involved in reducing social disparities in the health sector?
3. What is the capacity of your institution to get involved in reducing social disparities in the health sector?

(for Ministry of Health)

4. Is the Ministry of Health and Human Services a role model for other Ministries and Institutions in addressing social disparities in the health sector?
5. To what extent does the Ministry of Health and Human Services coordinate campaigns for physical activity, road safety, promoting healthy food and healthy market, and reducing violence through initiatives such as healthy cities, healthy markets, and healthy communities that are accessible to all residents?

RESPONDING TO GLOBAL GOVERNANCE

1. To what extent is the health sector involved (negotiation/diplomacy) at the national and/or global level in social issues (economy, education, employment, etc.) that affect health?
2. What are the challenges and barriers experienced in implementing the global concept of equality in Indonesia?

MONITORING AND ACCOUNTABILITY

1. How does your institution monitor social disparities in the health sector in Indonesia?
2. What are the challenges and barriers in monitoring social disparities in the health sector?
3. Which Ministry or State institution would you recommend to evaluate/monitor social disparities (education, economy, sanitation, etc.) on a regular basis?

IMPACT OF COVID-19 ON SOCIAL DISPARITIES IN THE HEALTH SECTOR

1. What are the social disparities that are increasing during the COVID-19 pandemic?
2. How does the government reduce/mitigate social disparities during the COVID-19 pandemic?
3. What is the achievement of these programs?
4. What are the challenges and barriers in these programs?

APPENDIX 2

Social Determinants of Health Actions in Southeast Region Countries - Checklist

Please response to all of the Action areas respondent to the Rio Political Declaration of Social Determinants of Health 2012. There are 18 core questions and 1-3 follow up questions responsive to each question to provide supplement yet needed information. Country consultation with multisectoral stakeholders responding to these questions is encouraged, particular if there is no national programme/focal points for social determinants of health in the government.

After respond to all the questions, additional studies, qualitative research, case studies on best actions achieved in addressing health determinants and inequities can be added with text and photos (if there is any).

A. National Governance

No	Core questions	Follow up questions if answer in the core question is YES.
1	Is there national strategy and coordination mechanism for health in all policies (HiAP)?	1. Is three national agenda applying HiAP whole of government approach: If yes, please specify 2. Has sectors been identified in country HiAP framework? If yes, which sectors involved in HiAP implementation 3. Has national government established a whole-of-government mechanism that is accountable to parliament, chaired at the highest political level possible.
2	Is there intersectoral action for health and explicit plan/programmes to address health inequities?	1. Are there programmes demonstrated the best investment for intersectoral action addressing inequities at national level? 2. Has health sector leading afore mentioned intersectoral action? 3. Is there target population and sufficient financial allocation to address health inequities?
3	Has social protection across the life-course been implemented?	1. Is social insurance scheme fully implemented for all population groups, especially to the poorest quintile, elderly, disable person, ethnic minority across age group, etc.? If yes, please specify which group has regular support/benefit from such scheme 2. Has social protection coverage for employment and unemployment reach 50% of population? 3. Has social protection for employment extended to informal workers and/or migrant workers?
4	Has educational institutions and relevant ministries act to increase understanding of the social determinants of health, particularly for early childhood learning and quality education for children and adolescent?	1. Has quality of early childhood care improved over the past decade and extended to vulnerable groups? If yes, please provide % of change and specify key factors contributing to the improvement 2. Has healthy communities, schools, and workplaces being implemented to improve quality of health and education? If yes, please specify which setting are prioritized 3. Has there been faire resource allocation to improve quality of early childhood care and service, with quality education?

B. Participation

No	Core question	Follow up questions if answer in the core question is YES.
5	Has the policy making process inclusive of people participation especially with relevant policies affecting health determinants?	1. Are there explicit procedure and process to support fair representation of people from different backgrounds (youth, elderly, people living with disabilities, ethnic groups, minorities, etc.) in decision makings for policies/programmes affecting health? If yes, please specify the programme(s)Is there people participatory approach to request government to conduct health impact assessment of public policy/programme/project?
6	Has public health policy/programmes designed and operated with recognition of universal human rights, 'right to health', and specific attention to human rights of vulnerable and discriminated population?	1. Is stigma reduction and mitigation of discrimination being integrated in public health programmes/services? 2. Has your country developed explicit "patient rights" statement and recognized in health facilities? 3. Has there be programmes commitment to sexual and reproductive health rights for women?
7	Is gender equity for women promoted or mainstream in government programmes across sectors?	1. Are there policies/programmes dedicated to close gender gaps in education, skills, and economic participation in your country? 2. Is there increasing implementation of policies, laws, and interventions addressing gender biases for women in areas of employment, accessing to social services, and continue education? 3. Has the central administration of the government provided adequate and long-term funding for gender equity promotion and gender analysis?
8	Is there local participatory mechanisms to enable communities and local government in building healthier and safe cities?	1. Has there been decentralized procedure for local government to generate community consultation on issues impacting health and wellbeing of the population? 2. Are there mechanisms and provisions for local government to implement healthy cities/communities? If yes, which Ministry is leading the support 3. Has Ministry of Health provided guidance and take part in local health development plans?

C. Health sector orientation

No	Core question	Follow up questions if answer in the core question is YES.
9	Is there national health equity surveillance system, with routine collection of data on social determinants of health and health inequity?	1. Has national surveillance system included the following disaggregated data? (please answer yes/no on each item): a. age, sex, marital status, education level, income level b. place of residence, type of housing, type of employment c. ethnicity, religion, other cultural status 2. Has provincial/community health information collected routinely with above mentioned disaggregated data? 3. Has data and evidence on social gradients been analyzed to design health interventions/service deliveries?
10	Has there been an improvement in integration of equity considerations to health systems, policy, and programmes?	1. Has national health policy have explicit aspiration to address health inequities and support intersectoral actions to address key determinants of health in country? 2. Is there explicit target to address inequalities in accessing health services and programmes designed for specific vulnerable groups?
11	Is equity in accessing health services improved?	1. Is there multisectoral/intersectoral design of health services responsive to existing inequities and vulnerabilities? 2. Are there joint-programmes between health and other sectors to improve health service deliveries? If yes, please identify which sectors and programmes Are there barrier analysis or equity assessment of health services? If yes, which health programmes have done so

12	Are human resource capacities for addressing SDH and universal health coverage improved?	1. Is there dedicated national focal point for social determinants of health or relevant position enhancing coordination addressing health determinants with other sectors in Ministry of Health? If yes, which department the position is located 2. Have health workforce particularly community health workers been oriented on determinants of health in order to improve universal health coverage? 3. Have people-centered health programmes considered key determinants to be addressed in order to provide effective health service deliveries?
13	Has there been continuous leadership from health sector to convene intersectoral actions promoting fairer system and governance for health and wellbeing?	1. Has MOH demonstrated leadership roles in promoting intersectoral actions and partnership with key sectors to improve equitable access to health services? 2. Has MOH demonstrated important roles in conducing health impact assessment in public policies to mitigate potential damage to physical and social determinants of people's health? 3. Has health sector coordinated and codesigned urban areas to promote physical activity, investment in active transport and safety, encourage equitable distribution of healthy food and healthy markets, and reduce violence through initiatives such as healthy city, healthy market, healthy communities that accessible to all population?

D. Respond to global governance

No	Core questions	Follow up questions if answer in the core question is YES.
14	Has health sector participated in negotiation of domestic and international economic policies that impacting health system and population health?	1. Has representative of health sector been visible in domestic and international economic policy negotiation (e.g. interference of tobacco industries, and import of harmful/unhealthy products, trade agreements, etc.)? 2. Has health sector produced adequate evidence for health diplomacy and negation in the global economic forum? 3. Has national public finance mechanism been developed including special health taxation e.g. tobacco taxation?
15	Has international cooperation promoting health equity been strengthened?	1. Has health sector developed/joined international networks to promote health equity e.g. global network on social determinants of health action, global network of health equity (GNHE), regional network-Asia indigenous people, regional health security for sustainable development, etc.? 2. Has health sector capacity on health diplomacy been strengthened? If information available, how many health workforce obtain trainings on health diplomacy

E. Monitoring and accountability

No	Core questions	Follow up questions if answer in the core question is YES.
16	Has the monitoring of social determinants and health equity indicators, and health equity impact assessment of all government policies been institutionalized?	1. Has government conducted monitoring report on social determinants of health and equity indicator in the past 10 years? If yes, when was the last report 2. Has health equity impact assessment of government policies been conducted? If yes, when and please indicate which policy went through health equity impact assessment Has social determinants of health country profile has been developed and update periodically?
17	Has investment in monitoring, research and evaluation of action on SDH and health equity increased?	1. Is there financial investment on monitoring, research, or evaluation of action on social determinants of health and health equity? 2. Has the budget to monitoring health equity on regular basis been increased?

18	Is there contextualized social, economic/commercial, political and cultural determinants of health studies done in the country?	1.	Has there been official study(ies) reported on specific topics on social, economic/commercial, political and cultural determinants of health affected with specific health programme(s)? If yes, please provide the titles and years of the publications
		2.	Has socio-behavioral insights qualitative research been considered/integrated in public health emergencies focus on vulnerable groups? If yes, please provide list of studies published as national report Has there been reporting of health status of population who being "left behind" development agendas? If yes, please provide list of studies/publication

Additional texts for best SDH actions achieved in country

Please provide the text summarize success story within 800 words along with link to publication, website show-casing best practice and photo.
[Please note important of best practice in addressing structural determinants of health and primary achievement (e.g. governance, population-based intervention, game changer in community empowerment, effective participatory action impact assessment, etc.)]

Important case studies in recent years may include:

- Specific case studies on socio-economic impacts of COVID-19 and equitable access to vaccine
- Vulnerable groups (people living with disabilities, urban poor, aging, orphans, people in detention, migrant population, internal displace persons) health status and equitable access to health/social services: challenges, barriers, and innovative pathways to overcome the challenges.
- Application of gender and equity lens in health programme development
- Commercial determinants of health, consumer protection, and healthy food system
- Innovative actions on building evidence, community data, participatory policy dialogue mechanisms, etc.
- Or other emerging issues in country at national or subnational level

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