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## RESEARCH ARTICLE

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# Indonesia's Bilateral Health Diplomacy in Building National Pharmaceutical Resilience

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## ABSTRACT

The disruption of the global pharmaceutical supply chain due to the COVID-19 pandemic has placed the independence of pharmaceutical preparations as a priority in realizing national pharmaceutical resilience given the high dependence of the domestic pharmaceutical industry on imported raw materials. This study aims to determine the strategies and achievements of Indonesia's bilateral health diplomacy in meeting the national resource gap in the context of building pharmaceutical sector resilience. The research was conducted using a qualitative approach with a case study design by utilizing data obtained from literature studies. The results showed that Indonesia's bilateral health diplomacy through the making of bilateral health cooperation agreements, organizing business forums, and working visits to partner countries proved to be able to fill the gap in efforts to build national pharmaceutical resilience through strengthening pharmaceutical resources, implementing technology transfer, concrete business cooperation between pharmaceutical companies, and increasing foreign direct investment. However, diplomacy improvement and refinement of the achievements of bilateral health diplomacy need to be continued so that bilateral health diplomacy can provide real benefits for the development of national pharmaceutical security.

**Keywords:** bilateral agreements; business forums; health diplomacy; pharmaceutical resistance; working visits

## INTRODUCTION

### Background

The Coronavirus Disease 2019 (COVID-19) pandemic has had a huge impact on various sectors, including pharmaceuticals. The mobility restriction policy up to lockdown implemented by China,<sup>(1)</sup> as well as export restrictions on 26 active pharmaceutical ingredients by India<sup>(2)</sup> caused disruption of the global pharmaceutical supply chains due to production stoppages and distribution delays. The disruption of the global pharmaceutical supply chain has also impacted the Indonesian pharmaceutical sector due to the high dependence of the national pharmaceutical industry on imported drug raw materials. There is a scarcity and price spike of pharmaceutical products, especially drugs that are considered potential and used in COVID-19 therapy because the national pharmaceutical industry is only able to operate at 50-60% capacity due to limited supply of raw materials.<sup>(3)</sup> The government even sets the highest selling price for 11 types of drugs to protect and guarantee public access to these medicines.<sup>(4)</sup>

Apart from the COVID-19 pandemic, the use of imported raw materials also results in high production costs for local generic drugs, making them uncompetitive,<sup>(5)</sup> especially if there are fluctuations in the exchange rate of the rupiah against foreign currencies.<sup>(6)</sup> On the other hand, Indonesia is a very potential market for pharmaceutical products because Indonesia is the fourth most populous country in the world, as well as the implementation of the National Health Insurance Program (JKN) has been mandatory since in 2014. The increase in the pharmaceutical sector market is expected to continue in the next few years along with the increase in Indonesia's population, the higher public awareness of the importance of health, and the increase in people's income and purchasing power. Fitch Solutions (2021) in [mediaindonesia.com](http://mediaindonesia.com) states that drug sales in Indonesia in 2025 are expected to reach 12.6 billion USD.<sup>(3)</sup>

This condition realizes the importance of independence in building national pharmaceutical resilience and places it as a priority issue. Through the Ministry of Health's Strategic Plan (Renstra) 2020-2024, Indonesia targets the production of 10 chemical drug raw materials, 10 biological product raw materials, and 27 phytopharmaceutical product raw materials with the highest use by the domestic pharmaceutical industry in 2024.<sup>(7)</sup> Nevertheless, the development of national pharmaceutical independence and resilience requires a lot of resources and cannot be fully met by national resources. For this reason, collaboration is the key to answering various challenges in the development of national pharmaceutical security. Collaboration between countries is very necessary considering that the challenges faced are also cross-border and cannot be overcome by one country alone. For example, the gap in the need and supply of COVID-19 vaccines between developed and developing countries. The bilateral cooperation is believed as the best tool in fighting for a country's interests, both through trade and investment by promoting the country's image and culture because it is built on the interests of both countries.<sup>(8)</sup> For this reason, this study aims to answer key questions related to the strategies and achievements of Indonesia's bilateral health diplomacy in filling resource gaps for the development of national pharmaceutical security.

## METHODS

This research used a qualitative approach with a case study design that aims to explore and develop knowledge of the object of research in more depth. Data collection was conducted through a literature study of bilateral cooperation agreement documents, policies, regulations, books, journals, articles, and other sources relevant to the research topic. The author limits Indonesia's bilateral health diplomacy to diplomatic efforts undertaken by the Ministry of Health as the leading sector in fostering and developing the drug raw material and finished medicine industries, including for the formulation and determination of technical policies.

The bilateral health cooperation agreement documents analysed in this study are all cooperation agreements signed by the Ministry of Health with partner countries from 2010 up to October 2022. The cooperation agreement documents were obtained from the official website of the Ministry of Health, as well as the Ministry of Foreign Affairs as the authorized institution to manage the international treaty documents owned by all ministries/government institutions in Indonesia. If the bilateral health cooperation agreement has been renewed several times, then the last agreement document is used as a reference in this study. Other health diplomacy efforts undertaken by the Ministry of Health were obtained through the Ministry of Health's official release, which continuously informs all progress and achievements of Indonesia's health diplomacy.

## RESULTS

The direction of Indonesia's health diplomacy policies and strategies refers to the National Medium-Term Development Plan (RPJMN), the Ministry of Health's Strategic Plan (Renstra), cross-sector views and inputs, and Indonesia's foreign policy, to produce the bilateral cooperation that can comprehensively support Indonesia's national interests.<sup>(9)</sup> In this regards, the bilateral health cooperation can only be carried out with countries that have diplomatic relations with Indonesia by putting forward the principles of equality of rights and positions, respect for the sovereignty of each country, not interfering with domestic stability and security, and providing benefits to the country and society.<sup>(10)</sup>

Indonesia's bilateral health cooperation is divided into three concentric circles. In the first concentric circle, bilateral health cooperation is conducted with countries in the Southeast Asian region or those that are members of the Association of Southeast Asian Nations (ASEAN), namely Brunei Darussalam, Cambodia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Vietnam and Indonesia. In the second concentric circle, cooperation is carried out with countries that are members of ASEAN+3 (ASEAN member countries with the addition of Japan, China and South Korea), as well as with countries that are Indonesia's main economic partners, such as the United States and the European Union. As for the third concentric circle, bilateral health cooperation is carried out with like-minded developing countries (LMDCs), such as India and Cuba.<sup>(9)</sup>

These are some of the strategies and achievements of Indonesia's bilateral health diplomacy in supporting the development of national pharmaceutical independence and resilience.

### **Establishment of Bilateral Health Cooperation Agreements (Government-to- Government)**

Indonesia's bilateral health cooperation agreements with partner countries can be expressed in various forms and names, such as Agreement, Memorandum of Understanding (MoU), Memorandum of Cooperation (MoC), Letter of Intent (LoI), Implementing Arrangement (IA), Technical Arrangement (TA), and other forms and names that contain the rights and obligations of each party.<sup>(10)</sup> As of October 2022, Indonesia has 27 bilateral health cooperation agreements as shown in the table below.

Table 1. The bilateral health cooperation agreements between The Ministry of Health of The Republic of Indonesia and partner countries (as of October 2022)

No	Partner Country	Validity period
1	United States of America	May 21, 2019-2024
2	Saudi Arabia	March 1, 2017-2027
3	Australia	February 3, 2022-2027
4	Dutch	November 6, 2018-2023
5	Brunei Darussalam	7 February 2015-2020
6	China	November 28, 2017-2024
7	Denmark	June 25, 2021-2026
8	India	October 9, 2018-2021
9	English	22 June 2020-2025
10	Iran	26 October 2018-2024
11	German	April 15, 2021-unlimited (until terminated by either party)
12	Japan	October 19, 2020-2025
13	Kazakhstan	September 10, 2021-unlimited (until terminated by either party)
14	Colombia	16 October 2019-2024
15	South Korea	November 9, 2017-2020
16	Cuba	May 24, 2017-2022
17	Lao PDR	13 August 2019-2024
18	Maldives	December 27, 2021-2024
19	Mexico	October 6, 2013-2016
20	Myanmar	November 8, 2019-2024
21	Papua New Guinea	September 20, 2019-2022
22	United Arab Emirates	January 12, 2020-2023
23	Qatar	18 October 2017-2029
24	Singapore	22 May 2019-2022
25	Timor Leste	February 14, 2022 - 2027
26	Turkey	May 21, 2019-2024
27	Vietnamese	29 August 2019-2024

Source: Bilateral health cooperation agreement document (processed)

From all the cooperation agreements that have been concluded, there are only 22 cooperation agreements that include pharmaceuticals and medical devices as one of the areas of cooperation, namely with the United States,<sup>(11)</sup> Australia,<sup>(12)</sup> Brunei Darussalam,<sup>(13)</sup> Denmark,<sup>(14)</sup> India,<sup>(15)</sup> United Kingdom,<sup>(16)</sup> Iran,<sup>(17)</sup> Germany,<sup>(18)</sup> Japan,<sup>(19)</sup> Kazakhstan,<sup>(20)</sup> South Korea,<sup>(21)</sup> Cuba,<sup>(22)</sup> Lao PDR,<sup>(23)</sup> Maldives,<sup>(24)</sup> Mexico,<sup>(25)</sup> Myanmar,<sup>(26)</sup> Papua New Guinea,<sup>(27)</sup> United Arab Emirates,<sup>(28)</sup> Qatar,<sup>(29)</sup> Timor Leste,<sup>(30)</sup> Turkey,<sup>(31)</sup> and Vietnam.<sup>(32)</sup> The following is an overview of the scope of cooperation areas included in Indonesia's bilateral health cooperation agreement.

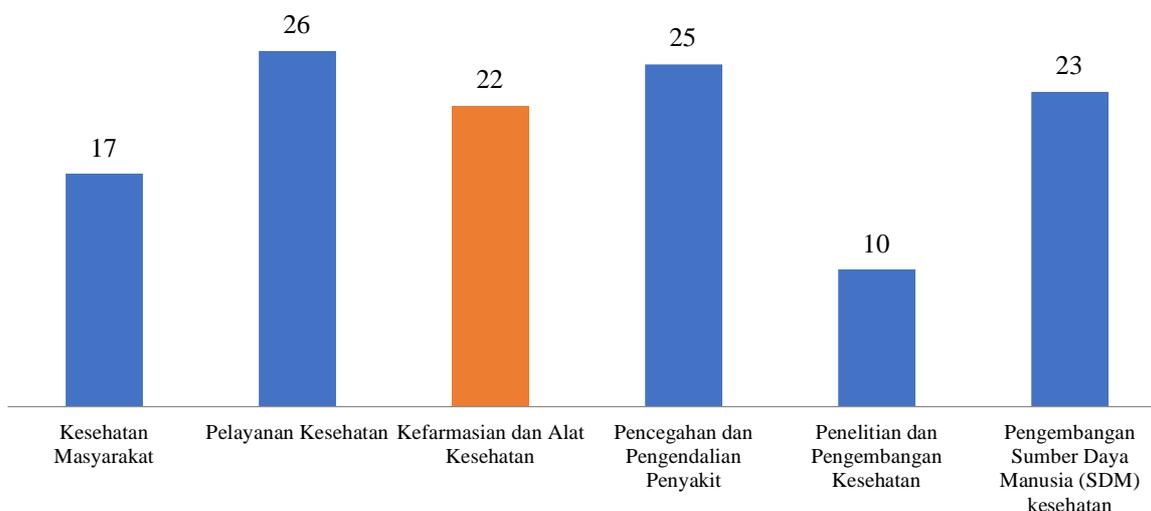


Figure 1. Coverage of bilateral health cooperation areas of cooperation

Source: Bilateral health cooperation agreement document (processed)

To ensure the bilateral health cooperation agreement can provide concrete benefits for health development and implemented effectively, a plan of activities that will be implemented by both parties during the validity period of the bilateral health cooperation agreement is prepared, in a document known as Plan of Action (PoA) or Joint Action Plan (JAP). However, not all bilateral health cooperation agreements have a PoA/JAP. To date, there are only 10 bilateral health cooperation agreements that have a PoA/JAP. Out of the 10 existing PoA/JAP, only 6 of them included pharmaceutical-related activity plans, namely the Indonesia-Brunei Darussalam PoA,<sup>(33)</sup> the Indonesia-Iran PoA,<sup>(34)</sup> the Indonesia-South Korea PoA,<sup>(35)</sup> the Indonesia-Cuba PoA,<sup>(36)</sup> the Indonesia-United Arab Emirates JAP,<sup>(37)</sup> and the Indonesia-Timor Leste PoA.<sup>(38)</sup>

Table 2. Planned activities between Indonesia and partner countries in the pharmaceutical sector

No	Partner country	Activity plan
1	Brunei Darussalam	Exchange of information on traditional medicines, drugs and regulations related to health technology through: <ol style="list-style-type: none"> <li>Sharing information on the regulation of substandard and adulterated drugs.</li> <li>Sharing information on adverse drug resistance, especially for traditional medicine products used only in the region.</li> <li>Sharing information and communications technology applied in the pharmaceutical sector.</li> </ol>
2	Iran	<ol style="list-style-type: none"> <li>Pharmaceutical development in both countries through:           <ol style="list-style-type: none"> <li>Sharing information on the registration process and regulation of pharmaceutical products.</li> <li>Encourage investment in the pharmaceutical industry in Indonesia and Iran.</li> <li>Exchange of information on pharmaceutical pricing system.</li> </ol> </li> <li>Cooperation on medicines through:           <ol style="list-style-type: none"> <li>Sharing knowledge and increasing business opportunities related to drug production.</li> <li>Transfer of knowledge and technology related to pharmaceuticals.</li> <li>Training courses related to pharmaceuticals.</li> </ol> </li> <li>Collaboration on traditional and complementary pharmaceutical products of interest through:           <ol style="list-style-type: none"> <li>Sharing information related to policy-making and regulation on traditional and complementary pharmaceutical products.</li> <li>Workshop on safety testing, quality control, system management and risk management.</li> </ol> </li> <li>Development of halal vaccines by conducting joint research and production of halal vaccines.</li> </ol>
3	South Korea	<ol style="list-style-type: none"> <li>Cooperation on blood bags production.</li> <li>Blood plasma fractionation cooperation.</li> <li>Development of investment opportunities in the pharmaceutical sector.</li> <li>New vaccine development.</li> </ol>
4	Cuba	Cooperation between the Indonesian and Cuban pharmaceutical industries coordinated by the Governments of each country through: <ol style="list-style-type: none"> <li>Development of business cooperation (including business model development) between Bio Farma and potential biopharmaceutical companies in Cuba related to new cancer therapies, halal meningococcal vaccines, biosimilars and other areas of interest.</li> <li>Development of cooperation between Phapros and potential pharmaceutical companies in Cuba in diabetes, orthopaedics, and cardiovascular and lung diseases.</li> <li>Exchange of information, knowledge, experience, and technology through the establishment of a biotechnology-based pharmaceutical industry, the use of biotechnology products including vaccines, regulations regarding pharmaceutical products, and potential cooperation through the establishment of focal points towards negotiating cooperation agreements on issues surrounding regulations.</li> <li>Procurement of pharmaceutical products, generic drugs, and essential drugs.</li> </ol>

No	Partner country	Activity plan
5	United Arab Emirates	<ol style="list-style-type: none"> <li>1. Development of the pharmaceutical sector in both countries through:               <ol style="list-style-type: none"> <li>a. Sharing information related to pharmaceutical registration and regulatory processes.</li> <li>b. Exchange of information on pharmaceutical pricing systems.</li> </ol> </li> <li>2. Development of business cooperation between potential pharmaceutical companies in Indonesia and the United Arab Emirates through:               <ol style="list-style-type: none"> <li>a. Facilitation of meetings of pharmaceutical companies in both countries.</li> <li>b. Exchange of lists of pharmaceutical companies in both countries.</li> </ol> </li> <li>3. Vaccine production cooperation through discussions regarding cooperation in the production and distribution of vaccines to the United Arab Emirates in accordance with applicable laws and regulations in both countries.</li> </ol>
6	Timor Leste	Cooperation on border surveillance system for substandard and adulterated pharmaceutical products through the establishment of a technical agreement on border surveillance system for substandard and adulterated health products.

Source: JAP/PoA document (processed)

### Organizing Business Forum

The Health Business Forum (HBF)/Health Business Gathering (HBG) is a forum aimed at matchmaking business to business between the Indonesian pharmaceutical industry and the pharmaceutical industry of other countries, as well as encouraging joint ventures and joint production.<sup>(39)</sup> HBF/HBG generally consists of a series of activities, such as dialog forums between regulators and the industry, field visits to the Indonesian pharmaceutical industry and one on one business meetings.<sup>(40)</sup> Indonesia has organised a number of HBFs/HBGs in various levels of cooperation. Several HBF/HBG activities were carried out at the bilateral level, including the Indonesia-Iran Health Business Forum held on September 3, 2019 in Jakarta. The forum succeeded in identifying a number of potential cooperation between the two countries, such as joint ventures, joint research, joint meetings, joint production, and joint brands for advanced technology. In this regard, Iran expects full cooperation with Indonesia due to the absence of an embargo on the health sector, as well as the expansion of cooperation related to nanotechnology for the pharmaceutical sector.<sup>(41)</sup> On October 6, 2022, Indonesia also held the Indonesia-Japan Pharmaceutical & Medical Devices Business Forum, which was attended by more than 300 participants, both offline and online. At that forum, a cooperation agreement was signed between the Association of Indonesian Pharmaceutical Companies (GP Farmasi Indonesia) and the Federation of Pharmaceutical Manufacturers Association of Japan (FPMAJ) for research and co-production cooperation.<sup>(42)</sup>

### Working Visits to Partner Countries

At the bilateral level, Indonesia has made working visits to several countries, such as South Korea and the United States. The working visit of the Minister of Health together with the Coordinating Minister for Maritime Affairs and Investment to South Korea on May 23-27, 2021 was carried out in the context of increasing health and investment cooperation. During the visit, Indonesia conveyed a number of policies taken by the Government to attract foreign investors. Some of South Korea's investments in Indonesia include a drug raw material factory in Cikarang (cooperation between PT Kimia Farma and Sungwun Pharmacopia), Daewoong Infion factory in Surabaya (cooperation between PT Infion and Daewoong Co), development of the COVID-19 vaccine (cooperation between PT Kalbe Farma and Genexine), and plans to build a blood plasma fractionation plant (cooperation between PT Biofarma and SK Plasma).<sup>(43)</sup> The Deputy Minister of Health's working visit to the United States on September 13-17, 2021 resulted in the signing of an MoU between PT Biofarma and Baylor College Medicine (BCM), Google Health and Dynavax Technologies for the development of a seed vaccine with a recombinant protein platform.<sup>(44)</sup>

## DISCUSSION

The implementation of Indonesia's bilateral health diplomacy which divided into three concentric circles, is in accordance with the statement revealed by Alice Pannier that prioritising bilateral cooperation can be analogous to a dartboard. The core layer contains the most important countries, neighboring countries, countries with great power or countries that are considered very important, which number around 12-15 countries. The middle layer consists of priority countries with special political, economic, cultural or ethnic ties, numbering 20 or more. The periphery layer includes other countries waiting to be explored.<sup>(8)</sup> In this regards, the implementation of bilateral health cooperation agreements, business forums, and working visits by the Ministry of Health is focused on priority countries for Indonesia.

Indonesia's bilateral health cooperation agreement in the pharmaceutical sector is also in line with the Action Plan for the Development of the Pharmaceutical Industry and Medical Devices, where cooperation activities are encouraged to strengthen resources and transfer technology.<sup>(45)</sup> Resource strengthening and technology transfer are needed to increase the capability and capacity of the national pharmaceutical industry to transform into a holistic industry. Currently, the cooperation in strengthening pharmaceutical resources is still limited to the industry and government level, and has not yet touched the realm of educational institutions. In this regard, the Action Plan for the Development of the Pharmaceutical and Medical Device Industry mandates that educational institutions to develop educational curricula and pharmaceutical research methods which are in accordance with the needs and standards of the national and global industries to strengthen the national pharmaceutical structure. Educational institutions are one of the stakeholders that have an important role in the development of the national pharmaceutical industry. As for technology transfer, Indonesia already has technology transfer cooperation with Brunei Darussalam, Iran and Cuba. Technology transfer cooperation with Brunei Darussalam is limited to the communication technology in pharmaceutical sector, while cooperation with Iran has a broader scope since the technology transfer can be carried out in all technologies used for medicines. The technology transfer cooperation with Cuba is focused on the establishment of a biotechnology-based pharmaceutical industry and the use of biotechnology products. The author in the view that the technology transfer cooperation has not been optimal since the number and scope are still limited. On the other hand, technology transfer cooperation with foreign partners is very important because the national pharmaceutical industry that is able to master the latest pharmaceutical technology is still minimal. Furthermore, it was not possible to analyse Indonesia's cooperation activities with several countries known as the world's pharmaceutical giants, such as the United States, India, Germany, and Japan due to the unavailability of JAP/PoA documents and it is regrettable that the bilateral health cooperation agreement between Indonesia with United Kingdom and China do not include pharmaceuticals in the agreed area of cooperation.

In addition to resource strengthening and technology transfer, foreign direct investment and concrete business cooperation between pharmaceutical companies are also become the main goals of Indonesia's bilateral health diplomacy. Indonesia already has cooperation on investment and business concrete through the bilateral health agreements with several countries, such as Iran, South Korea, Cuba, and the United Arab Emirates, as well as through HBG/HBF and working visits. Suyanto, Salim, and Bloch (2009) stated that significant foreign direct investment in pharmaceutical sector can create positive spillovers. It will increase competitiveness and encourage the national pharmaceutical industry to use its resources efficiently so that productivity increases.<sup>(5)</sup> Organizing HBF/HBG is expected to attract foreign direct investment in the pharmaceutical sector through joint venture cooperation. Andreas Respondek and Johannes M. Respondek (2018) said that joint ventures are used by the pharmaceutical industry for various commercial purposes, such as joint markets, development of certain products, conducting joint research and/or clinical trials or just to create synergy between joint venture partners. Joint ventures are commonly used by countries whose local regulations only allow foreign investment participation through this mechanism.<sup>(46)</sup> In Indonesia, foreign investors in the pharmaceutical raw materials industry will get fiscal and/or non-fiscal incentives from the Government. This is expected to stimulate foreign investors to invest in Indonesia's pharmaceutical sector.

The increased of foreign investment through joint ventures is also expected to encourage research activities in the pharmaceutical sector. As a knowledge-based industry, research is an essential part of the pharmaceutical sector. Research in the biopharmaceutical industry plays an important role in the development of new technologies for medicines and vaccines to prevent and treat diseases, and improve the lives of patients around the world.<sup>(47)</sup> Research is not only aimed at producing substitute products to reduce dependence on imported drug raw materials, but also to encourage the discovery of new drugs (innovative products) that are highly competitive in order to meet the needs of the national and global pharmaceutical markets.<sup>(48)</sup> However, the large amount of resources required and the high failure rate mean that research activities in Indonesia's pharmaceutical sector are still minimal. Data from the Ministry of Research, Technology and Higher Education in 2015 showed that there were only 11 studies related to the development of medicinal raw materials out of 13,000 studies conducted. The research conducted is also still on a laboratory scale so that not much can be utilised by the industry.<sup>(49)</sup> The Indonesian Minister of Health for the 2019-2020 period, Terawan Agus Putranto, revealed that the lack of investment in the basic chemical sector has contributed to the high import of drug raw materials.<sup>(6)</sup>

The practice of diplomacy through the implementation of visits to other countries is something that has been done since the beginning of Indonesian diplomacy, such as the visit of the President of the Republic of Indonesia to Pakistan in 1950 and November 1990 to China.<sup>(50)</sup> Working visits in the context of Indonesia's bilateral health diplomacy are carried out to strengthen bilateral health cooperation with partner countries as is done with South Korea and the United States given the existence of bilateral health cooperation agreements with these two countries or to explore cooperation with countries that have the potential to support the development of national pharmaceutical independence and resilience. The visit of the Minister of Health and/or other high-officials to partner countries or other potential countries shows Indonesia's seriousness to establish and or increase bilateral cooperation with these countries.

Considering the three achievements of Indonesia's bilateral health diplomacy above, the author is of the view that Indonesia's health diplomacy is not only aimed at overcoming existing health problems (ensuring the availability and public access to pharmaceutical products), but also for developing business in this sector. This is in accordance with what Cooper et al (2013) stated that health diplomacy can be carried out in two contexts: responding to health challenges, such as infectious diseases, non-communicable diseases and health disorders, health system capacity issues, and social determinants of health, and as soft power to achieve other non-health objectives.<sup>(51)</sup>

## CONCLUSION

Health diplomacy has become part of the practice of diplomacy in Indonesia. Bilateral health diplomacy is the best form of diplomacy in building national pharmaceutical resilience given the cross-border challenges of pharmaceutical sector development, as well as the limited national capacity in fulfilling the necessary resources. This study found three strategies of Indonesia's bilateral health diplomacy in supporting the development of national pharmaceutical resilience, namely the establishment of bilateral health cooperation agreements with partner countries, organizing business forums, and working visits to partner countries. The strategies and achievements of Indonesia's bilateral health diplomacy are able to fill the gap in the development of national pharmaceutical resilience through strengthening pharmaceutical resources, implementing technology transfer, concrete business cooperation between pharmaceutical companies in both countries and foreign direct investment. However, efforts to improve and enhance diplomacy activities are still needed so that the achievements of bilateral health diplomacy can provide tangible benefits to the nation and people of Indonesia.

## Recommendation

Several things need to be done to optimize the achievements of Indonesia's bilateral health diplomacy, including: 1) develop JAP/PoA for all cooperation agreements that include pharmaceuticals as one of the areas of cooperation, such as with the United States, Denmark, India, and Germany, as well as the creation of activity plans in the pharmaceutical sector in the Indonesia-UK JAP MoU; 2) reviewing the activity plans contained in the JAP/PoA in order to accommodate the improvement of the quality of pharmaceutical human resources in educational institutions and technology transfer for imported pharmaceutical products with high utilisation rates and not yet able to be produced domestically; 3) reviewing bilateral health cooperation agreements with several countries which have developed pharmaceutical industries, such as China, the UK and the Netherlands in order to cover the pharmaceutical sector; 4) mapping potential countries in supporting the development of the national pharmaceutical industry for the expansion of cooperation, such as Switzerland; 5) organizing business forums on a regular basis, both with countries that already have bilateral health cooperation agreements with Indonesia or other potential countries; 6) conduct working visits to partner countries for increasing cooperation and or to other potential countries for exploring cooperation, 7) focusing foreign direct investment in research and development activities in the fields of biotechnology and basic chemistry, and 8) monitoring and evaluating each achievement of bilateral health diplomacy to ensure the sustainability of its implementation.

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