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# COVID-19 Vaccine Mandates in Southeast Asia: A Comparative Study of Policies in Malaysia, the Philippines, Thailand, and Vietnam

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## ABSTRACT

The COVID-19 pandemic precipitated a global emergency and governments employed various strategies to increase COVID-19 vaccine coverage across the population, including vaccine mandates. No comparative study has evaluated the development, implementation, and structure of COVID-19 mandatory vaccination policies in the Southeast Asia region. This paper uses a modified 5Ss systematic conceptual framework—which is composed of scope, sanctions, severity, selectivity, and salience—to analyse the operation of COVID-19 mandatory vaccination policies in Malaysia, the Philippines, Thailand, and Vietnam. Using document analysis, we describe and compare COVID-19 Immunisation Programmes, implementation of vaccine mandates, exemptions, and enforcement in the four countries. It finds that their COVID-19 Immunisation Programmes included mandates despite formal statements that the vaccinations were voluntary. Differences include the declarations of emergency, policy amendments and measures that underpin mandates; the severity of sanctions applied to the unvaccinated; how people opt out or avoid enforcement; and governance arrangements demonstrating varying levels of responsibility at different levels of government. Our comparative analysis leads us to propose a new continuum of available COVID-19 vaccine sanctions based on their degree of severity, which can be used for future analysis. Future studies should determine the effectiveness of these policies to inform future pandemic strategies to achieve high vaccine coverage.

## 1 | Introduction

The COVID-19 pandemic precipitated a global emergency for humankind, with substantial effects on public health, economic growth, social well-being, and healthcare systems. Public health and social measures were enacted with differing degrees of stringency, but the fast development of COVID-19 vaccines meant uptake of vaccines was key to ease various restrictions and reduce social and economic effects. People grappled with this public health response, while governments enforced policy in the face of uncertainties (Boin et al. 2021).

Vaccine mandates are described as "interventions imposing consequences for non-vaccination" (Attwell et al. 2022) and in

**Summary**

- Despite declaring COVID-19 vaccination to be voluntary, all four countries applied multiple types of vaccine mandates.
- Analysis based on the 5S framework shows that the four countries adopted vaccine mandates with variants in *scope* (different vaccines), *sanctions* and *severity* (various types and degrees of penalties), and *selectivity* (different requirements and opt-outs).
- The proposed continuum of vaccine sanctions based on their degree of severity may help to inform vaccine policy development for future emergencies.

routine settings, some scholars consider vaccine mandates as a "quick fix" intervention to achieve high uptake rates (Attwell and Navin 2019; MacDonald et al. 2018) when other approaches such as awareness campaigns, community-engagement strategies, nudging, or even financial incentives are not fruitful (Sprengholz et al. 2022). During the COVID-19 pandemic, government officials may have perceived that there was not enough time to pursue these measures to their full extent or to evaluate their efficacy before introducing mandates, given the scale and constantly shifting terrain of the public health emergency (Boin and Lodge 2021; Boin et al. 2021). Therefore, COVID-19 vaccine mandates were implemented in many countries (Attwell et al. 2022; Mello et al. 2022; Sprengholz et al. 2022; Viskupič et al. 2022).

Vaccine mandates do not have a standard approach (MacDonald et al. 2018) and vary significantly in terms of shape, content, and political reception (Attwell et al. 2022). Pre-pandemic, MacDonald et al. (2018) outlined a series of components to be considered in implementing mandatory vaccinations. To guide governments and researchers considering vaccine mandates, the 5Ss framework has been developed by Attwell and Navin (2019) for routine settings. It takes into account a mandate's *scope* (which vaccines are mandated); *sanctions* and *severity* (type of penalty and degree of penalty imposed); and *selectivity* (how policy instruments and policy actors enforce compliance or exempt people from mandates) to determine *salience* of a mandate. Scholars have considered how the 5Ss might be updated for the pandemic setting, but thus far have only done so early in the pandemic and based on news reporting from various global cases (Attwell et al. 2022). In the post-pandemic phase, it is timely to reflect on how governments used COVID-19 vaccine mandates to boost vaccination rates (Attwell et al. 2022). Tejero et al. (2023) found that employers who implemented vaccine mandates for their employees increased the likelihood of vaccination among Filipinos. Lee et al. (2022) also reported similar findings in the United States, where workplace requirements led to higher COVID-19 vaccination uptake among healthcare workers.

Southeast Asian countries were among the earliest to be affected because of their geographical location and trade relationships with mainland China (Amul et al. 2022). Accordingly, this article focuses on Malaysia, the Philippines, Thailand, and Vietnam, as the first comparative study on COVID-19 vaccine mandates in this region. This study offers new knowledge about how some ASEAN countries faced the pandemic and applied mandatory vaccination policy. A key contribution is the proposed continuum of vaccine sanctions based on the degree of severity, which provides implications for policymakers in future emergencies.

The article is structured as follows: The methods section explains case selection, data collection and analysis; the results section presents the implementation of COVID-19 vaccine mandates in four ASEAN countries—Malaysia, the Philippines, Thailand, and Vietnam; and the discussion section synthesises and compares the cases and advances an updated theoretical framework for considering the severity of sanctions. The final section provides implications for vaccine policy in Southeast Asian countries.

## 2 | Methods

An analysis by Rampal et al. (2021) has shown that Malaysia, the Philippines, Thailand, and Vietnam implemented strong public health measures during the early stages of the COVID-19 pandemic to control virus transmission. However, these four countries differ in healthcare systems. For instance, the Philippines and Vietnam operate under decentralised health systems (Chongsuvivatwong et al. 2011), while Malaysia has a two-tier healthcare system that includes both the public and private sectors (World Health Organization 2012), and Thailand provides universal health coverage (Sumriddetchkajorn et al. 2019). These factors underline the need for empirical research, and no prior study has compared COVID-19 vaccine mandates among these four developing nations. Fortunately, the contributing authors are members of the Asia-Pacific Vaccine Research Network and participated in the DFAT Australia Awards Fellowship Training programme, which provided an opportunity for collaboration and leveraged local information. This study employed qualitative document analysis strategies for data collection. Document analysis involves examining different types of documents containing text, such as institutional reports, newspaper articles, academic journal articles, and books (Morgan 2021). This method has been chosen because it is a practical research method compared to other qualitative methods, which would consume more effort and time for data collection (Merriam and Tisdell 2015; Morgan 2021).

Figure 1 shows a modified version of a 5Ss conceptual framework. In this version, *scope* refers to the number of doses mandated. *Sanctions* are the consequences imposed on individuals who choose not to vaccinate, while *severity* pertains to the seriousness of those consequences. *Selectivity* refers to vaccination exemptions that are often based on medical conditions, religious beliefs, or personal objections. Together, these components influence *salience*, which describes how burdensome the vaccine mandate is in determining individuals to get vaccinated. To utilise the framework in this study, the first and senior authors built a template to catalogue the types of information sought about each country's policies. In addition to the 5Ss, this template included details such as the government's response actions during the COVID-19 outbreak, the National Immunisation Programme for COVID-19, specific vaccine

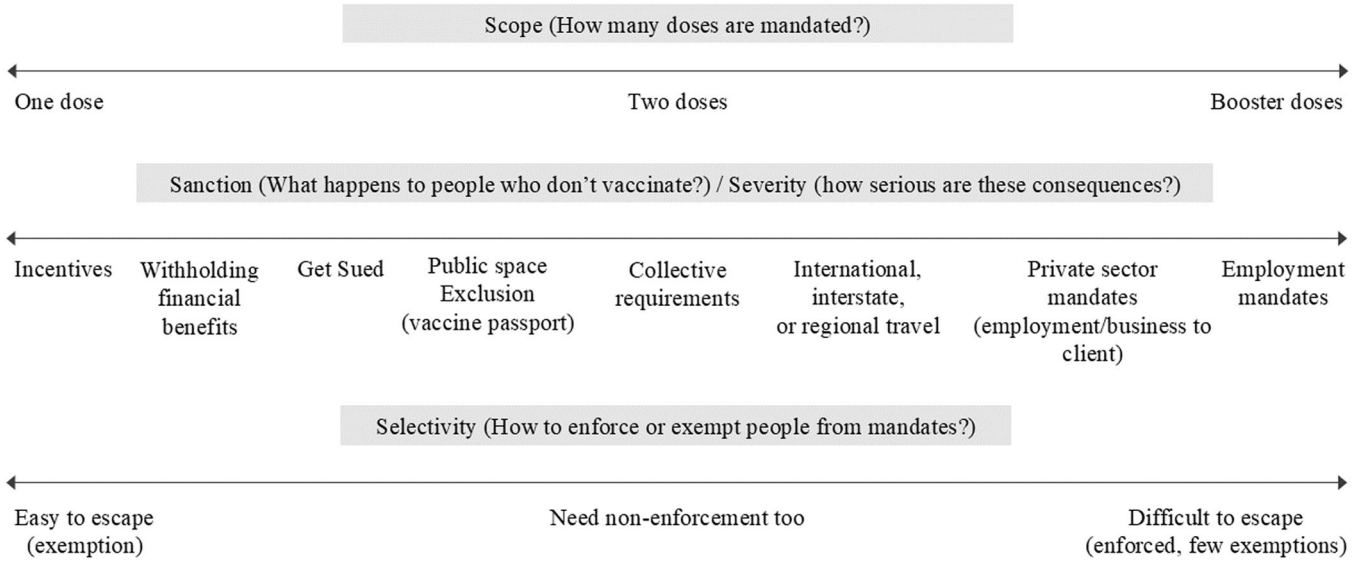


**FIGURE 1** | The modified conceptual framework (Attwell and Navin 2019).

mandates imposed by the government and a table for characteristics of those mandates.

Based on the template, native-speaking authors from each participating country gathered information during COVID-19 pandemic through meticulous analysis of government policy documents, official government media statements, and academic research. Using multiple data sources was crucial for establishing the reliability and validity of the primary data (Kaman and Othman 2016; Yin 2009). The authors identified significant scholarly literature examining the epidemiology and early response of COVID-19 in Southeast Asia (Chu et al. 2022; Djalante et al. 2020; Fauzi and Paiman 2021; Nurdin et al. 2022; Rampal et al. 2021). However, very few studies focused on COVID-19 vaccine mandates have been conducted in these regions. This gap led the authors to investigate mainstream news content further to strengthen the case using authentic sources. This approach has been used in scholarly publications for years (Singh and Ravikumar 2018). In-country authors also considered factors outlined by Flick (2022) in deciding on the documents, namely authenticity, credibility, and meaning by aiming for primary sources of data as well as reliable sources such as government official websites.

Content analysis is suitable for analysing written texts such as documents, speeches, and newspapers to identify concepts or patterns (Elo and Kyngäs 2008). This approach aims to provide knowledge, a representation of facts, and a possible guide to action (Krippendorff 2018). As this study applied the modified 5Ss conceptual framework, deductive content analysis (Kyngäs et al. 2019) was used to synthesise, compare, and analyse the data between countries. To address the differences in policy implementation, the lead author organised the findings and discussion under several subheadings. Tables were used to align with key attributes and legends were introduced to provide clarity and enhance the analysis. The senior authors cross-checked and validated all the patterns, including the commonalities and differences between countries. Additionally, the risks associated with "lost in translation" and biased interpretation were addressed by (1) triangulating the data from multiple sources, (2) cross-checking the manuscript draft multiple times, and (3) having continuous back-and-forth discussions with in-country authors and other experts from the respective countries in fora such as international academic conferences to ensure the accuracy of the data. All these strategies aimed at enhancing the reliability and validity of this study (Kaman and Othman 2016; Leung 2015; Rose and Johnson 2020).

## 3 | Results

### 3.1 | Malaysia's COVID-19 Vaccine Mandates

#### 3.1.1 | Policy Responses Laying the Foundations

Malaysia recorded its first case of COVID-19 on January 25, 2020 (Elengoe 2020; Ramli et al. 2022). A sharp rise in cases from March 14, 2020 was linked to a religious event in Sri Petaling (Rampal et al. 2021; Tang 2022). In response, the government implemented a movement control order (MCO) nationwide from March 18, 2020 to prevent transmission (Djalante et al. 2020; Fauzi and Paiman 2021; Prime Minister's Office 2020). The MCO restricted gathering and movement, including international travel, and closed non-essential business premises, industries, government and education institutions (National Security Council 2020; Prime Minister's Office 2020). The government implemented subsequent MCOs in various durations and intensities, including the original MCO (ended on May 3, 2020), the conditional movement control order (CMCO) (May 4, 2020 to June 9, 2020), the recovery movement control order (RMCO) (June 10, 2020 to January 1, 2021) and the enhanced movement control order (EMCO), sometimes applying them to specific areas (Selvarajah et al. 2023). These MCOs became the basis of Malaysia's vaccine mandates, which subsequently restored people's ability to engage in the restricted activities on the basis of being fully vaccinated.

Meanwhile, in April 2020, the Malaysian government launched the MySejahtera application (Figure 2) to facilitate COVID-19 contact tracing via a check-in function before entering any


**FIGURE 2** | MySejahtera check-in (Ministry of Health 2020).

premises (MyGovernment 2023). This application would likewise be central to Malaysia's vaccine mandates when proof of vaccination was added to its functions.

Malaysia's King declared a Proclamation of Emergency from January 11, 2021 to curb the spread of COVID-19 (Prime Minister's Office 2021c). Following this proclamation, the Emergency (Prevention and Control of Infectious Diseases) (Amendment) Ordinance 2021 was promulgated and brought a significant change to Section 25 of the Prevention and Control of Infectious Diseases Act 1988 (Act 342). The amendment of Section 25 increased the fine for violating standard operating procedures from RM1,000 (USD$209) to a maximum of RM10,000 (USD$2092) for individuals and a maximum of RM50,000 (USD$10,460) for companies. These increased penalties would underpin Malaysia's vaccine mandates until October 25, 2021, when the emergency ordinance was annulled and original penalties were resumed (Selvarajah et al. 2023). The government once again took a crucial measure by implementing a nationwide total lockdown in phases starting from June 1, 2021 as COVID-19 cases surged tremendously (Prime Minister's Office 2021b). Again, lockdown conditions would feature in Malaysia's vaccine mandates for COVID-19.

### 3.1.2 | The COVID-19 National Immunisation Programme—Pre-Mandate

Malaysia's COVID-19 vaccination programme was initially planned and announced as voluntary but highly encouraged. Vaccines were free for all, including non-citizens. The government aimed for at least 80% of the adult population to be vaccinated by February 2022 (Jafar et al. 2022; The Special Committee for Ensuring Access to COVID-19 Vaccine Supply 2021). The COVID-19 National Immunisation Programme officially rolled out on February 24, 2021 (Jafar et al. 2024; New Straits Times 2021; Ramli et al. 2022). Several brands were used: Pfizer, Sinovac, AstraZeneca and CanSino (Selvarajah et al. 2023). Individuals with medical reasons could access a special digital exemption certificate through the MySejahtera application after medical expert confirmation (Ministry of Health 2021b, 2021f). In addition, the Special Muzakarah (discussion) of the National Council for Islamic Religious Affairs decreed that the use of the COVID-19 vaccine is permissible (The Special Committee for Ensuring Access to COVID-19 Vaccine Supply 2021). As of March 7, 2022, 98.7% of the adult population had received two doses of COVID-19 vaccine (Ministry of Health 2022b).

### 3.1.3 | Vaccine Mandates in Malaysia

With rates of COVID-19 falling in the community, the government on August 8, 2021 granted certain privileges to individuals who had completed their vaccinations. As vaccinated people now enjoyed freedoms from limitations placed during the state of emergency and the MCOs, this functioned as a vaccine mandate, with unvaccinated people denied the restoration of freedoms and privileges.

The first phase re-granted permission for congregational prayer activities in mosques with strict standard operating procedure compliance. Congregants were required to present digital COVID-19 vaccination certificates (Figure 3) to mosque staff using the MySejahtera application, which was upgraded to include a digital vaccination certificate. This privilege was also given to non-Muslims to attend houses of worship. In addition, the government also allowed fully vaccinated long-distance married couples to cross state and district borders to visit each other, and fully vaccinated parents to likewise visit their minor children. Travellers had to present the digital certificate of COVID-19 vaccination via the MySejahtera application at the police roadblock. Moreover, dining at restaurants and participating in tourism activities were permitted for fully vaccinated individuals (Prime Minister's Office 2021e).

Next, on September 15, 2021, came workforce vaccine mandates. The Prime Minister announced the relaxation of the prohibitions placed on economic and social sectors subject to workers' full vaccination. Again, the conditional return of "workforce participation" functioned as a vaccine mandate for employment. For example, all private offices in particular states

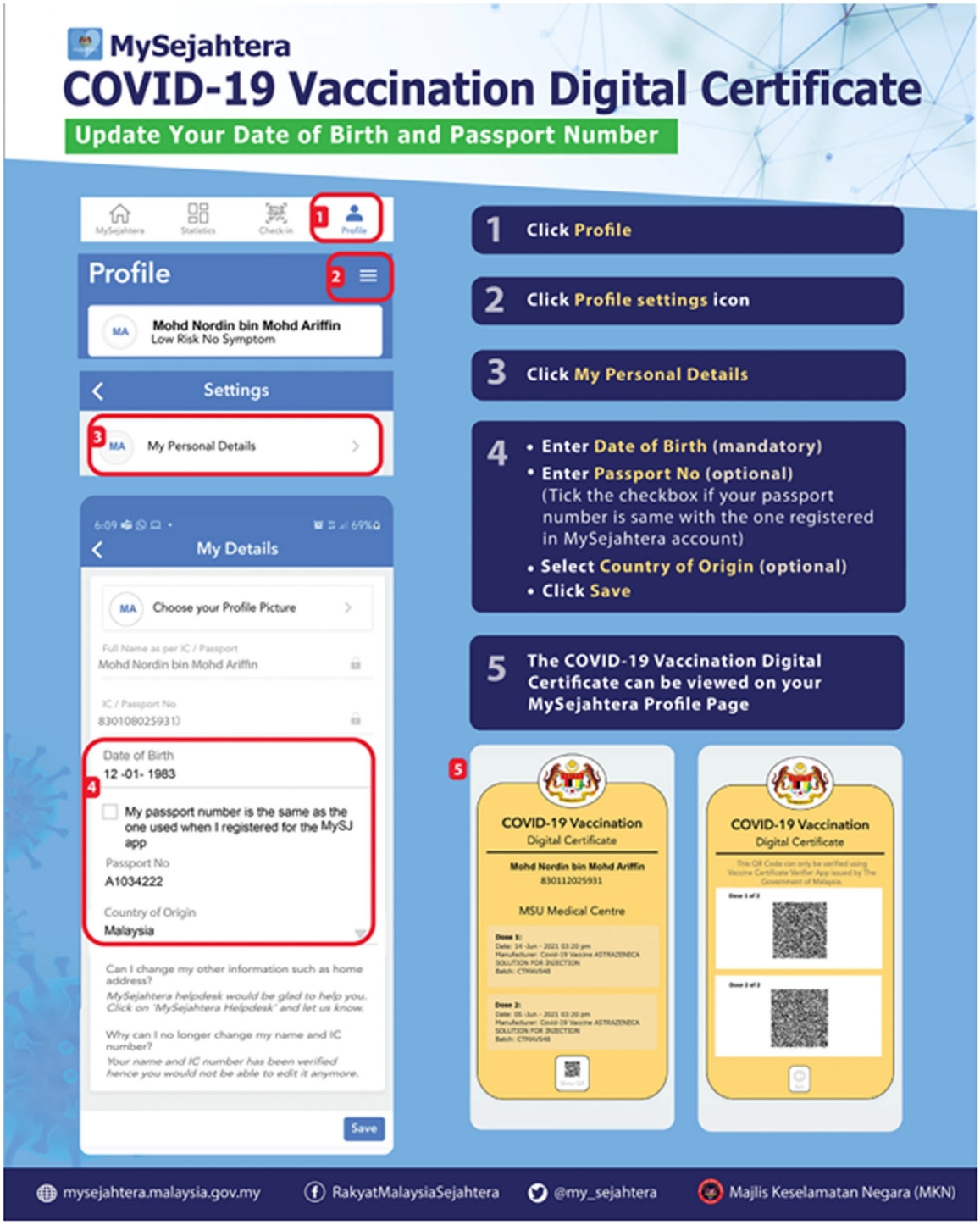


**FIGURE 3** | Digital COVID-19 vaccination certificate in Malaysia (Ministry of Health 2021e).

were allowed to operate with certain conditions: (1) a capacity of 60% of employees if 40% of employees had completed their vaccination, (2) a capacity of 80% of employees if 60% of employees had completed their vaccination, and (3) a capacity of 100% of employees if 80% of employees had completed their vaccination (Prime Minister's Office 2021a). This type of mandate, also known as collective requirements, used the "carrot" of workplace attendance for private offices based on staff vaccination coverage rates (Attwell et al. 2022). Tying businesses' or individuals' capacity for in-person work to the vaccination status of the collective is an instrument designed to motivate individuals to vaccinate and also to apply pressure on others around them to do the same (Attwell et al. 2022).

Then, effective on October 11, 2021, the Malaysian government introduced its travel mandate. Interstate travel and international travel were newly permitted, but only for those who had completed full COVID-19 vaccination. Eatery owners, grocery stores, shopping centres and sports facilities had to check customers' vaccination status and exclude those who were noncompliant (Prime Minister's Office 2021d). The government reiterated that the authorities would continue to conduct random inspections to ensure compliance with standard operating procedures (MalayMail 2021; Prime Minister's Office 2021d). Premise owners and individuals could be fined for violating standard operating procedures (Astro Awani 2021; Harian Metro 2021).

After that, on October 18, 2021, the Public Service Department mandated all public servants to complete their COVID-19 vaccination before November 1, 2021. Noncompliant public servants could be subject to disciplinary action under effective regulations (Public Service Department, Malaysia 2021). The Public Service Commission and the Education Service Commission also set strict requirements for interview candidates for new roles: only fully vaccinated candidates were allowed to enter the interview centre (Education Service Commission, Malaysia 2021; Public Service Commission, Malaysia 2021).

Finally, to reduce imported cases, starting on April 1, 2022, travellers from abroad were required to show proof of a negative RT-PCR test, laboratory proof of recent infection (if relevant) and proof of complete vaccination during the security check upon arrival. Unvaccinated or partially vaccinated individuals were required to quarantine for 7 days (Ministry of Health 2022a).

The characteristics of Malaysia's vaccine mandates are summarised in Table 1.

## 3.2 | Philippines COVID-19 Vaccine Mandates

### 3.2.1 | Policy Responses Laying the Foundations

The first Philippine case of COVID-19 was confirmed on January 30, 2020 by the country's Department of Health. As numbers continued to rise, the government declared a public health emergency on March 8, 2020 (Baclig 2021), and then imposed lockdowns to try to contain disease spread. Subsequently, varying degrees of movement restrictions were imposed on different provinces, based on case numbers and healthcare utilisation rates (Amit et al. 2021). Originally intended to last for only a month, the Philippines became known as the country with the world's longest lockdown, which officially ended on March 2022 (Associated Press 2022). Unlike in Malaysia, lockdown and quarantine policies did not *directly* connect to the restoration of freedoms and rights under the country's subsequent vaccine mandates. However, they are still relevant to contextualise them. In September 2021, the government developed the VaxCertPH tool, which later became proof of vaccination in the country's subsequent vaccine mandates (Department of Information and Communications Technology, Philippines 2021; Official Gazette of the Republic of the Philippines 2021).

### 3.2.2 | The COVID-19 National Immunisation Programme—Pre-Mandate—and the Philippines' Minimalist COVID-19 Vaccine Mandates

The Philippines' vaccination programme launched on March 1, 2021, considered voluntary but highly encouraged. Initially the Sinovac vaccine was used; other brands were subsequently made available. Although electronic recording of doses was part of the design of the vaccination programme, encoding data at the local government level led to delays and led to instructions from the national government to accept both paper and electronic records (Department of the Interior and Local Government, Philippines 2021).

As more doses became available and a growing proportion of the population qualified for vaccination, government and public discussions in the Philippines centred on whether to impose a mandate. In resolving this issue, authorities in the Philippines introduced far fewer mandatory vaccination policies than Malaysia, although like Malaysia, they maintained that vaccination remained voluntary.

The mandates that the Philippines did introduce were less stringent, with available opt-outs. The main mandates consisted of policies restricting people's mobility and access to work or essential services based on vaccination status. For example, entry into public spaces such as shopping malls (Inquirer.Net 2022a; Office of Consular Affair, Philippines 2022; Philippine News Agency 2021; Spot.PH 2021), use of public transportation services (VOA 2022) or religious activities in the cathedral (OneNews.PH 2022) were dependent on the presentation of a vaccination card [see item C (Interagency Task Force 2021)]. From December 1, 2021, the national government required workers in offices and public transport staff to be fully vaccinated (Reuters 2021). Challenges with recording vaccine doses became a critical issue as vaccination records became essential (GMA News Online 2022). Paper-based vaccination cards and certification by other authorised government agencies eventually filled the gap (Department of the Interior and Local Government, Philippines 2021).

However, despite the ostensible requirements for vaccination, these policies functioned as "soft mandates" only (Commission on Human Rights, Republic of the Philippines 2021). For those who chose not to be vaccinated (or remained unvaccinated for other reasons), a recent negative RT-PCR test result was an alternative mechanism for satisfying the proof-of-vaccination requirement [see Item A (Interagency Task Force 2021)]. The

**TABLE 1** | Characteristics of vaccine mandates in Malaysia, the Philippines, Vietnam, and Thailand.

| Country | Scope | Sanction (for unvaccinated) | Selectivity (Exemptions/ Exclusions/Opt-outs) | Severity of penalties/ enforcement agent | Gaps | Status of the current mandate |
|---|---|---|---|---|---|---|
| Malaysia | Complete dose of primary series of any vaccine from Pfizer, Sinovac, AstraZeneca, or Cansino | Cannot attend workplaces (e.g., private office) unless organisation has minimum % vax coverage to open/operate in-person. | Medical only: special digital exemption certificate through My Sejahtera app after medical expert confirmation | Maximum RM50,000 (USD$10,460) fine for company by authority bodies for all offences by companies | Random checks practices by the authorities will leave some people undetected | Removed after the emergency ordinance was annulled on 25 October 2021 |
| | | Sanctions at work for government workers | | Disciplinary action by the Head of Department for government employee | | |
| | | Cannot travel interdistrict and interstate | | Max RM10,000 (USD $2092) fine for individual by police for breaching | | |
| | | Cannot be recruited into public service | | Lost job opportunities in public sector | | |
| | | Cannot access public spaces (e.g., shopping malls) | | Policed by staff and police | | |
| | | Cannot dine-in | | | | |
| | | Cannot perform religious activities in houses of worship | | Policed by staff | | |
| | | Cannot access country from overseas | Proof of negative test and quarantine 7 days | | | |
| Philippines | Complete dose of primary series of any vaccine granted EUA by the PhilFDA | Cannot attend some workplaces (private mandates) Cannot travel | No formal medical exemption, since there is no official mandate | No clear indication or uniform national strategy | Enforcement dependent on vigilance of security staff at public facilities, drivers of public transportation, or workplace management | Requirement for vaccination cards/ COVID-19 RT-PCR tied to community alert levels. Since early 2022, mobility restrictions lifted and documents no longer required |
| | | Cannot access some public spaces | Unvaccinated individuals required to show COVID-19 RT-PCR results updated at | | | |

(Continues)

**TABLE 1** | (Continued)

| Country | Scope | Sanction (for unvaccinated) | Selectivity (Exemptions/ Exclusions/Opt-outs) | Severity of penalties/ enforcement agent | Gaps | Status of the current mandate |
|---|---|---|---|---|---|---|
| | | Cannot access country from overseas | regular intervals (e.g., every 2 weeks) to be allowed access to transport, public facilities, workplaces<br>Proof of negative test | | | |
| Thailand | Complete dose of primary series of any vaccine from Sinovac, AstraZeneca, Pfizer, Johnson & Johnson, Moderna, Sinopharm, or Sputnik V | Cannot attend workplaces<br>Cannot travel interstate<br>Cannot access country from overseas | No formal medical exemption<br>Proof of negative test and quarantine for 10 (by sea or air) or 14 (by land) days | Exclusions to be locally enforced by businesses | No official sanctions developed<br>Random checks by authorities will leave some people undetected | Removed after October 2022 |
| Vietnam | Complete dose of primary series of any licensed vaccine AstraZeneca, Sputnik V, Johnson & Johnson, Moderna, Pfizer, Sinopharm, Hayat-Vax, or Abdala | Cannot attend workplaces<br>Cannot travel<br>Cannot engage in trade<br>Cannot access country from overseas | Medical: paper-based exemption certificate<br>Recovery from COVID-19 or proof of negative test in some circumstances<br>Proof of negative test and quarantine for at least 7 days | Varying levels of severity due to local policymaking | Selectivity and severity dependent on localities | Vietnam gradually lifted COVID-19 restrictions throughout 2022 when the vaccination rate reached the target |

negative test had to be less than 2 weeks old and paid for by the individual at a cost of USD$40–50 per test (Inquirer.Net 2022b). Although this opt-out alternative was available, it was not widely publicised and may only have been offered to insistent refusers, creating the impression of a stronger requirement. Furthermore, the cost and inconvenience burdens of this repeated testing likely led many to opt in eventually.

Inbound travel was severely restricted following the imposition of the lockdown, and as vaccines gradually became available, requirements for entry were updated to include proof of vaccination or a recent negative RT-PCR test (The Philippine Embassy in Singapore 2022). There was no formal medical exemption process at a national level in the Philippines, but people with medical contraindications could use negative tests or a medical certificate instead of proof of vaccination [see item F (Interagency Task Force 2021)].

The characteristics of the Philippines' vaccine mandates are summarised in Table 1.

## 3.3 | Thailand's COVID-19 Vaccine Mandates

### 3.3.1 | Policy Responses Laying the Foundations

The first case of COVID-19 in Thailand was detected in early January 2020; the virus soon spread to many provinces, prompting the government to implement stringent public health and social measures (Rajatanavin et al. 2021; Triukose et al. 2021). The COVID-19 Emergency Decree was implemented nationwide on March 25, 2020, imposing strict control measures including travel restrictions, lockdowns, and widespread testing (Marome and Shaw 2021). Thailand used the Communicable Disease Act 2015 as another mechanism for disease control. The Act allowed health or designated authorities to quarantine cases, isolate high-risk contact, and provide necessary public health control measures (Ministry of Public Health 2020). As the COVID-19 Emergency Decree allowed more power to impose restrictions, it would later become the premise of Thailand's vaccine mandates in terms of selectively restoring people's freedom to work and travel, including the relaxation of foreign travel restrictions, subject to vaccination status.

### 3.3.2 | The COVID-19 National Immunisation Programme—Pre-Mandate

Thailand's COVID-19 National Immunisation Programme officially rolled out on February 28, 2021, featuring Sinovac at the earlier phase, followed by AstraZeneca, Sinopharm, Johnson & Johnson, Pfizer, and Moderna (Jitanan et al. 2022). From October 2021, free vaccines were provided for all Thais and non-Thai residents aged 12 years and over (Department of Disease Control, Thailand 2021a). As of March 2023, 146,758,556 doses of COVID-19 vaccines had been administered countrywide with approximately 81% of the target population fully vaccinated with two doses (Department of Disease Control, Thailand 2023). Thailand developed an official application called MOHPROMT for COVID-19 digital certificates as proof of vaccination in the country's subsequent vaccine mandates (MOHPROMT 2021).

### 3.3.3 | Vaccine Mandates in Thailand

As with the other case countries, COVID-19 vaccines were formally voluntary for the Thai population. The government encouraged vaccination but did not initially promulgate any official regulations or punishments for those who refused to get vaccinated (Department of Disease Control, Thailand 2021a). However, as with the other cases, the Thai government did mandate vaccination through other mechanisms, including through passing the responsibility to require vaccination to businesses and organisations. The Ministry of Public Health implemented a "COVID-19 free setting" in which all businesses were required to keep the facilities clean and safe, reduce congestion, and ensure that employees are fully vaccinated (Department of Disease Control, Thailand 2021b). However, the non-implementation of sanctions on unvaccinated employees in the workplace was a public controversy, with no official documents requiring punishment of the unvaccinated (McKenzie 2022).

The other key space in which Thailand introduced vaccination requirements was for intrastate and international travel. In October 2021, individuals travelling on aeroplanes were required by the Centre for COVID-19 Situation Administration (CCSA) to show proof of vaccination to the airlines' staff before their departure (The Coverage 2021). This requirement extended to incoming tourists when the country reopened in October 2021. Incoming travellers were required to be fully vaccinated for more than 14 days before their departures or provide proof of RT-PCR COVID-19 test negative for 72 h before their departure (Royal Thai Embassy, Canberra 2021; Thai Embassy 2021). As outlined in other countries, above, the overseas entrance travel mandate came with a clear (but more burdensome) opt-out. If arriving travellers had no proof or were partially vaccinated, they had to stay in state quarantine for 10 days if by sea or air or 14 days if by land, respectively (Thai Embassy 2021). From October 1, 2022, Thailand eliminated all COVID entry requirements.

The characteristics of Thailand's vaccine mandates are summarised in Table 1.

## 3.4 | Vietnam's COVID-19 Vaccine Mandates

### 3.4.1 | Policy Responses Laying the Foundations

The first confirmed case of COVID-19 in Vietnam was identified on January 23, 2020 (Nguyen et al. 2020; Van Nguyen et al. 2021). One week later, on January 30, 2020, the Prime Minister established the National Steering Committee for the Prevention and Control of Respiratory Infections Caused by COVID-19 (Government Electronic Information Portal 2020; Tran et al. 2020). Similar Steering Committees were also established at different administrative levels nationwide. Even though the country did not declare a state of emergency, the government applied stringent regulations in the early days of

the pandemic (Nurdin et al. 2022). Directive No.15 issued on March 27, 2020 cancelled all gatherings with over 20 people and all cultural, religious, sports, and entertainment activities and closed all non-essential businesses from March 28 to April 15, 2020. Directive No.16 issued on March 2020 applied a nationwide social distancing and lockdowns from 1 April 2020, including the closure of all non-essential businesses and public transportation (Tran et al. 2020). Directive No.19 issued on April 24, 2020 stopped lockdowns but continued cancelling all cultural, religious, sports and entertainment activities and all non-essential businesses. When the COVID-19 transmission became complicated in the fourth wave starting from April 27, 2021, lockdowns were locally implemented in hotspots (Minh et al. 2021). All these responses laid the foundation for vaccine mandates in the country, which (fully or partially) restored economic activities and lifestyles subject to people's individual vaccination status and/or the vaccination coverage rates of their regional areas.

### 3.4.2 | Vietnam's COVID-19 National Immunisation Campaign—Pre-Mandate

Vietnam implemented the country's largest-scale vaccination campaign ever from July 2021 (Nguyen et al. 2024). Vaccines were provided free of charge for all, including non-citizens. Vietnam licensed eight kinds of vaccines: AstraZeneca, Sputnik V, Johnson & Johnson, Moderna, Pfizer, Sinopharm, Hayat-Vax, and Abdala (Ministry of Health 2021a). The Ministry of Health confirmed that COVID-19 vaccination is voluntary because the existing laws in Vietnam did not mandate COVID-19 vaccination and WHO did not recommend mandatory vaccination (Tuoitre 2022a). However, as in the other cases, mandates were introduced by lower levels of government or by de facto processes.

### 3.4.3 | Vaccine Mandates in Vietnam

While setting high political determination and ambitious vaccine coverage, the central government gave the ministries and localities much authority in their COVID-19 control measures. This led to different types of vaccine mandates in Vietnam. With the spread of the Delta variant, on August 6, 2021, the government issued Resolution No. 86/NQ-CP with urgent solutions for COVID-19 prevention and control, providing local authorities with more power to apply strict measures as needed, including limiting transportation and mobility for unvaccinated people (Vietnamese Government 2021d). The national government also applied collective requirements (Attwell et al. 2022) by categorising four different zones based on the local severity and risks of the outbreak as well as the zone's vaccine coverage: green zone for low-risk areas, yellow zone for average-risk areas, orange zone for high-risk areas, and red zone for extremely high-risk areas (Vietnamese Government 2021e). Zone status determined the ways in which residents or workers could regain their freedoms through being vaccinated.

The Ministry of Transport stipulated that people travelling by road from orange and red zones to other places must have full doses of vaccines, which also applied to all drivers and staff on buses (Vietnamese Government 2021c). There were more extensive mandates for other types of travel, but these also came with opt-outs. Full doses of vaccines or a negative COVID-19 test were required for all passengers travelling by air (Ministry of Transport 2021). Travellers arriving from abroad needed either a certificate of negative test within 72 h before entering Vietnam (except for children under 2 years old), a certificate of full vaccines, or a certificate of recovery from COVID-19 and must implement quarantine at the residence for 3 days from the date of entry. Unvaccinated or partially vaccinated people were required to quarantine for at least 7 days (Ministry of Health 2021c).

The Ministry of Transport also regulated that workers in airports and railway stations must have at least one dose (Vietnamese Government 2021b). A looser work mandate was applied to the public sector where vaccination was presented as a "responsibility" and "political duty" (Government Electronic Newspaper 2021a). Building on Vietnam's political culture, individuals working in the government, the army, national security, and other formal organisations might be disciplined if refusing vaccination without medical reasons (NhanDan 2022; Tuoitre 2022b).

Different localities and organisations also utilised vaccine doses as a condition for workers to return to or remain on the job. In Tien Giang Province, the provincial authority required all employees coming back to work after office closures to have received two doses given at least 14 days before (Government Electronic Newspaper 2021b). Dong Nai Province stipulated that those who had received one dose could return to their workplaces after 14 days (Tuoitre 2021). Following the Ho Chi Minh municipal government's regulations, industrial zones in this city allowed employees to return to work if they had received one or two doses at least 2 weeks earlier (Ho Chi Minh City Media Centre 2021).

Vaccination was also a condition for trading activities in some areas. For example, in Ho Chi Minh City, employers, employees, and customers of trading centres, shops, supermarkets, and service deliveries were required to have a "COVID Green Card". There were two types of this card based on an individual's vaccination status. A full "COVID Green Card" was issued for those who had full vaccination doses and could participate in all activities, while a limited "COVID Green Card" was for partly vaccinated individuals, and this limited their scope of activities (Vietnamese Government 2021a). Employees in direct contact with customers, customers, drivers, and delivery people needed a full "COVID Green Card".

The implementation of these local vaccine mandates was supported by the national COVID-19 prevention and control app "PC-Covid" which was made available for smartphones (Figure 4). It provided the "COVID-19 card" to users who had been fully vaccinated or recovered from COVID-19, serving as a proof of vaccination to participate in travel and other activities (Ministry of Information and Communication 2021). This app also included the vaccine passport for international travel.

People with a clear history of anaphylaxis to the same type of COVID-19 vaccine (previous time) or have any contraindications as announced by the manufacturer, or with critical health


**FIGURE 4** | PC-Covid app for vaccination card generation in Vietnam (Ministry of Information and Communication 2021; RMIT University Vietnam 2021).

conditions were not allowed to be vaccinated (Ministry of Health 2021d). Medical screening was done at vaccination stations to exclude those people from the vaccination list. These individuals were provided with a COVID-19 vaccine contraindication certificate which they could show in lieu of proof of vaccination (Tintuc 2021).

The characteristics of Vietnam's vaccine mandates are summarised in Table 1.

## 4 | Discussion

### 4.1 | Mandate Enabling Actions and Technologies

Commonalities and differences amongst our four country case studies start with the emergency declarations and measures that underpinned most mandate policies. The declaration of a state of emergency on the grounds of public health priority was deemed important (Masum et al. 2021) to allow the authorities to exercise appropriate measures (Tantrakarnapa and Bhopdhornangkul 2020) and expedite transmission prevention strategies without onerous bureaucracies (Masum et al. 2021; National Security Council 2021). Granting governments extraordinary powers was generally significant in laying the foundation for subsequent vaccine mandates.

There was divergence regarding timing, however. The Philippines and Thailand declared emergencies in March 2020. Malaysia's emergency proclamation was almost a year later in January 2021. Vietnam did not declare a formal nationwide state of emergency despite applying strict measures. This demonstrates that the necessity of declaring a public health emergency is determined by national laws and customs; it is not always essential to the imposition of vaccine requirements in a given country. Beyond this study, Indonesia had yet another approach, declaring a public health emergency early (Ministry of the State Secretariat 2020), never imposing a nationwide lockdown (Djalante et al. 2020) but still implementing mandatory COVID-19 vaccination for all its citizens (Gibelli et al. 2022).

Like the declaration of a state of emergency, policy amendments or promulgations could also open avenues to vaccine mandates in each country or not. Malaysia increased fines for noncompliant individuals and companies substantially. Vietnam granted authorities more sweeping powers to require vaccination. By contrast, the Philippines and Thailand did not promulgate official regulations or punishments that would later be used against those who refused to be vaccinated, even though both declared states of emergency. Findings show the importance of considering how "procedural policy tools" form the building blocks of mandates but also demonstrate that these are highly context-specific (Bali et al. 2021).

Another key feature that opened up the technical possibilities for mandating vaccines in all cases was digital applications for showing an individual's proof of vaccination. The pandemic facilitated significant innovation in digital technologies for public health goals. Khan et al. (2022) described how the use of the Internet of Things (IoT), artificial intelligence (AI), and blockchain technologies assisted governments in managing the COVID-19 outbreak by offering important features such as contact tracing and proof of vaccination in digital form. These technologies went on to serve as significant tools in the implementation of the vaccine mandate, with individuals providing proof of vaccination to regain freedoms.

### 4.2 | The 5Ss—COVID-19 Vaccine Mandate Scope, Sanctions, Severity, Selectivity, and Salience

A striking similarity across all cases is that the countries' COVID-19 Immunisation Programmes were initially declared to be voluntary but highly encouraged yet—as elaborated throughout the case studies—all implemented some form of vaccine mandate. As a matter of fact, voluntary vaccination policy during the COVID-19 crisis was not an isolated approach. For example, the UK Secretary of State for Health, stated on November 21, 2021 that "mandatory vaccination was not something [the British government] would ever look at" (Burki 2022; The Independent 2021). Likewise, with the Netherlands, the Dutch government decided not to use interventions that could restrict individual choice for its COVID-19 vaccination programme (Health Council of the Netherlands 2021), hence, the policy was non-mandatory, equivalent to its routine childhood immunisation (Pijpers et al. 2023). However, following the surge of COVID-19 hospitalisations and deaths, particularly among unvaccinated people, mandates became

common in 2021 and early 2022 (Vogel 2023). Cameron-Blake et al. (2023) identified 55 countries that had imposed at least one type of vaccine mandate. Thus, these factors may have led Malaysia, the Philippines, Thailand, and Vietnam to adopt both voluntary and mandated measures to navigate the pandemic despite earlier and/or official pronouncements regarding voluntarism.

Next, the scope of vaccines available (and hence later mandated) was diverse because the studied countries initially faced constraints on vaccine supply (Chu et al. 2022) and could not afford to be inclined to favour certain manufacturers in critical situations, especially as most countries in Southeast Asia did not produce their own COVID-19 vaccines (Sim et al. 2022). Fu et al. (2024) reported that due to non-existent local vaccines, Southeast Asian countries had to make independent procurement efforts, unlike the European Union, which demonstrated a more unified effort to ensure equitable vaccine distribution. Grappling with the challenges, less than 5% of the population in ASEAN was vaccinated in the first half of 2021. Many low- and middle-income countries faced prolonged delays in vaccinating their populations due to limited vaccine availability (Park et al. 2021), but the governments of these four case study countries committed to providing free COVID-19 vaccines to all.

When it comes to sanctions, our further detailed comparative synthesis involved tabulating the overall types of COVID-19 sanctions introduced in Southeast Asia for the COVID-19 vaccine, as shown in Table 2.

The absence of an official national mandate (as COVID-19 Immunisation Programmes were officially declared to be voluntary) did not preclude the imposition of restrictions at other levels. This study identified nine types of sanctions for the unvaccinated: (1) workplace requirements; (2) travel prohibitions; (3) no entry to public spaces (e.g., shopping malls and public transportation); (4) fines for noncompliance with the various requirements of the mandate; (5) overseas entry requirements; (6) no religious activities in houses of worship; (7) no dine-in hospitality; (8) disciplinary sanctions at work for government workers; and (9) no new recruitment into public service. Implementation varied between countries. As illustrated in Table 2, Malaysia implemented nine types of sanctions that might be considered the strictest up front, the Philippines and Vietnam had four, and Thailand had three. The most common sanctions were: (1) workplace requirements; (2) travel prohibitions; (3) access to public spaces; and (4) overseas entry requirements. Only Malaysia imposed fines for individuals or organisations who did not comply with the various requirements of the mandate. Relative to the wages and cost of living in the country, these fines were high: a maximum of RM10,000 (USD$2092) for individuals; and a maximum of RM50,000 (USD $10,460) for companies. Again, Malaysia was the only country that imposed sanctions for new recruitment into the public service and no dine-in hospitality, for unvaccinated individuals. Other countries also imposed sanctions similar to those seen here. For instance, access-based mandates for public spaces were widely implemented in countries like France and Germany, while Italy also mandated COVID-19 vaccination for healthcare workers, police, armed forces, and school staff (Burki 2022; Charrier et al. 2022; Drew 2022). Australian states took similar

**TABLE 2** | COVID-19 vaccine sanctions at a glance.

| Countries | Sanction | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Workplace requirements | Travel prohibitions | No entry to public spaces (e.g., shopping malls and public transportation) | Fines for noncompliance with the various requirements of the mandate | Overseas entry requirements | No religious activities in houses of worship | No dine-in hospitality | Disciplinary sanction at work for government workers | No new recruitment into public service |
| Malaysia | √* | √* | √* | √* | √♣[a] | √* | √* | √* | √ |
| Philippines | √♣* | √♣* | √♣* | NA | √♣ | √♣* | NA | NA | NA |
| Thailand | √ | √ | NA | NA | √♣[a] | NA | NA | NA | NA |
| Vietnam | √♣ | √ | √ | NA | √♣[a] | NA | NA | √* | NA |

*Note:* *Accept exemption based on medical reason; ♣Accept exemption based on RT-PCR negative test at least in some cases; [a] Accept exemption if quarantine.

measures and required COVID-19 vaccination for travel within parts of the country (Attwell et al. 2022). Different sanctions may produce varying effects despite all working towards the overarching goal of achieving vaccination coverage targets.

Regardless of the type of mandate, exemption and enforcement are vital components of vaccine mandate policies (Attwell and Navin 2019). The selectivity of the mandate can include rules-based exemptions or opt-outs as well as deliberate or ad hoc nonenforcement by authorities (Attwell and Navin 2019). Medical exemptions are a widely used form of rules-based exemption in high-income countries, but the Philippines and Thailand did not formally employ them—it appears that medically exempt people in the Philippines were required to use the negative test opt-out instead, although medical certificates may also have been available. Given the private costs associated with obtaining testing kits, people with medical conditions that precluded their vaccination may have experienced significant challenges with complying with vaccine mandate requirements given the lack of a formal exemption mechanism. This may lead to social inequalities, a potential issue with vaccine mandates raised by WHO's Europe Director (Politico 2021). Further research is needed into how people with medical contraindications navigated COVID-19 requirements in these countries. Meanwhile, Vietnam and Malaysia both used certification for medical exemptions but these were digital in Malaysia and paper-based in Vietnam. Both could be subject to fraud by individuals who wanted to avoid vaccination, especially for public space mandates where the agent checking vaccination status was not from the government. This study did not uncover any concerns or issues in this regard, however.

Meanwhile, no country reported exemptions for personal belief or religious conviction, but Malaysia—a Muslim majority country—pre-emptively addressed potential religious objections by determining that the COVID-19 vaccine is permissible in Islam. Offering exemptions for personal belief or religious conviction is common in routine vaccination settings in some Western countries and was used in the United States for COVID-19 vaccine mandates (National Academy for State Health Policy 2024). However, such exemptions can undermine the power of vaccine mandates (Attwell et al. 2022), and authorities in our case study countries may have eschewed them for this reason: to prevent individuals from taking a "free ride". The collectivist politics of Southeast Asian countries may have also contributed, with governments less preoccupied with notions of individual rights and liberties due to their indigenous cultures, histories and traditions (Neher 1994). Such exemptions may also have been dismissed due to the voluntary policy proclamations, and it is possible that they were also overlooked inadvertently. Future research should investigate such considerations empirically with interviews.

This study identified the use of negative COVID-19 tests or lengthy periods in mandatory quarantine as opt-outs for some of their mandates, particularly those associated with travel, where unvaccinated or partially vaccinated travellers from abroad to had to show proof of a negative test or they would need to stay longer in quarantine. Unvaccinated people in the Philippines also had to show proof of negative test results (updated at regular intervals) to access transportation, public facilities, and workplaces. In certain localities in Vietnam, unvaccinated traders were permitted to use proof of negative tests to run their businesses in lieu of providing proof of vaccination. Providing such options can be regarded as a compromise for unvaccinated individuals to resume their daily life (Drew 2022).

The other aspect of selectivity relates to enforcement, as strict enforcement (e.g., physical exclusion from public spaces, actual imposition of fines for noncompliance) would make it more difficult for people to avoid vaccination than if authorities declare that a mandate exists but do not actually enforce it on the ground (Attwell and Navin 2019). Malaysia and Thailand employed authorities to ensure that people complied with the stipulated mandates—checking on the behaviour of members of the public as well as checking on the conduct of business owners or employees tasked with enforcing the mandates with members of the public. However, random checks in these countries may have failed to detect some unvaccinated individuals (Astro Awani 2021; Harian Metro 2021; Malay-Mail 2021). On the other hand, it appears that enforcement on civil servants was strict in Malaysia. The media reported that high courts had rejected the judicial review application of an ex-soldier, five teachers and 19 university staff who bid to challenge disciplinary action for refusing COVID-19 vaccination (Astro Awani 2023; The Star 2023). This scenario proved the vital role of employers in ensuring employee participation in vaccination (Nur Hafizah Yusoff and Muhammad Ridhwan Sarifin 2022) and their capacity to enforce the mandates. Meanwhile, the workplace requirement in Thailand lacked an enforcement mechanism, meaning that businesses were not officially obliged to exclude unvaccinated employees. Enforcement in the Philippines was also inconsistent, as since there was no official mandate, no regulations could be put in place. Similarly, there was limited information on the level of strict enforcement in Vietnam because governance arrangements varied considerably by region. In essence, enforcing vaccine mandates in these four countries appeared challenging, aligning with the argument by Mello et al. (2022) about the enforceability of mandates in general. Italy has also been reported to have a history of nonenforcement of its mandatory routine vaccination policies (Attwell et al. 2021). Like medical exemptions, the experiences of (non)enforcement in all our case countries warrant further investigation via different methodologies in future studies.

The governance of mandates in our four case study countries also varied. Multiple approaches demonstrated different levels of responsibility, such as (1) direct (government requiring vaccination of individuals); (2) indirect (government placing conditions on other agencies, for example, workplaces, and private enterprises to require the vaccination of their workers and/or clients); or (3) central governments passing powers down to local authorities to impose mandates rather than imposing mandates themselves. For example, illustrating the last type, Thailand and Vietnam enabled regional governments or private businesses to require vaccination, resulting in a "patchwork" of mandates rather than a uniform national or regional policy.

### 4.3 | Theoretical Advancement

#### 4.3.1 | Sanctions and Their Severity

The previous 5S mandate model developed for routine immunisation settings considered a far more limited set of sanctions than we have explored in this study. Accordingly, we propose an updated continuum of COVID-19 vaccine sanctions based on the degree of their severity, drawing from the experiences of our case study countries (Figure 4). Some sanctions are considered strong because they could severely impact people's lives, leaving them with no or limited alternatives. On the other hand, milder sanctions have less impact on people's lives, as they have other options (Figure 5).

Requiring workers to be vaccinated was one of the "strongest" strategies to drive vaccine uptake in Southeast Asian countries. Failure to comply could result in loss of employment and related consequences. Imposing disciplinary sanctions on government workers can also badly impact their reputation, limiting their prospects regarding promotion and salary increases. We consider that workplace vaccine mandates would be generally "understood and accepted" in the public sector workforce, as the entire public sector operates under the remit of the national government. As noted above, they are also easier to enforce compared to mandates governing private sector workers. Government imposing mandates in the private sector, needs far more careful consideration, and legislative support becomes crucial. The case of workplace requirements in Thailand is relevant here. Without clear directions on what to do with unvaccinated employees (e.g., how or whether to sanction them when they do not comply with an official directive to be vaccinated), businesses cannot deliver government goals.

Denial of access to public goods or spaces can also be a significant type of sanction. It creates considerable disadvantages for unvaccinated individuals and may motivate them to get vaccinated so that they can enjoy public benefits and interactions (Attwell and Navin 2019). Therefore, no entry into public spaces (e.g., shopping malls and public transportation), travel prohibitions, overseas entry requirements and school entry requirements, are also regarded as strict strategies, offering few alternatives and impeding daily life activities. However, we regard the restriction on dine-in hospitality as "mild" as people could still have other options like takeout or delivery.

Similarly, the negative consequences of fines depend on the magnitude and any legal consequences for not paying (Attwell and Navin 2019). However, fines may have a significant impact if the financial penalty is high in the local context and/or charged multiple times (e.g., every time individuals or companies breach certain rules). We note that where authorities used fines in the cases in this study (Malaysia), the fines were large, and authorities deliberately and temporarily increased their size.

We consider exclusion from places of worship to be a moderately severe sanction. Participating in religious activity can be important and sensitive to people's well-being and sense of community/self. However, in the context of the pandemic, people had already been re-oriented to worship at home with their families. The severity of this sanction may need to be reconsidered outside of the pandemic context.

#### 4.3.2 | Target Population

Our analysis also identified an important feature missing from the 5Ss framework—who is the target of the vaccine mandate? To achieve the desired outcomes of the COVID-19 vaccine mandate, policymakers need to identify the target population. Schneider and Ingram (1993) emphasise understanding target populations as a key element in policy design, because different target populations may receive different messages, which would influence participation patterns and the aim to change people's behaviour. Target populations could include workers, disadvantaged

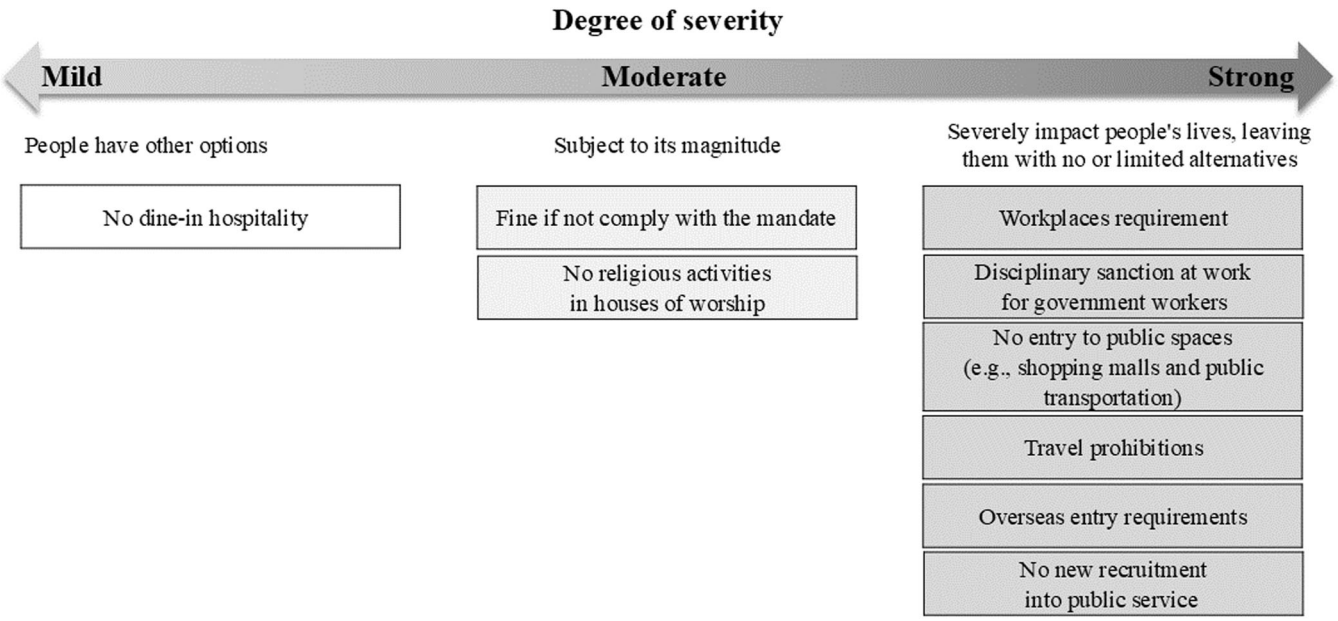


**FIGURE 5** | A proposed continuum of vaccine sanctions used in Southeast Asian countries.

individuals, those who are hesitant to get vaccinated, or the wealthy, among others. It is important to consider the implications of linking the target population with the type of vaccine mandate. For instance, imposing fines on unvaccinated individuals could be seen as unethical if some people are unable to get vaccinated due to access issues or other factors beyond their control (Leask et al. 2021; Omer et al. 2019). Similarly, threatening to fire unvaccinated individuals who are struggling with busy lives and other pressures could lead to social inequality (Leask et al. 2021; Omer et al. 2019). While identifying the target population is important in policy design, it must be done cautiously as a one-size-fits-all approach may not be appropriate. We have already noted above that people who could not be vaccinated for medical reasons (out of their control) should have been excluded from the target population of vaccine mandates, and yet it is not clear in our case study countries that this happened systematically or fairly.

## 5 | Conclusions and Policy Implications

This study has identified that Malaysia, the Philippines, Thailand, and Vietnam navigated the pandemic using various COVID-19 vaccine mandates. Overall, nine types of sanctions were identified. However, implementation varied between and sometimes also within countries. COVID-19 vaccine mandates often involve significant negative consequences for unvaccinated individuals. Our proposed continuum of vaccine sanctions based on the degree of severity may help to inform policy development in future emergencies. Future research should identify the best intervention strategies to optimise vaccination coverage while minimising negative consequences and address our identified issues regarding medical exemptions and (non)enforcement.

In addition, this study does not assess the effectiveness of COVID-19 vaccine mandate policies in terms of increasing vaccine uptake or the impact of variability of mandate implementation, especially in countries with regional policies. Therefore, future studies should aim to determine the effectiveness of vaccine mandate policies in these countries and assess the impact of inconsistencies in the policies, especially with implementation. Future studies may also focus on developing a pandemic policy model or framework that can be adapted to local and cultural contexts. A comparative analysis building on this one for all ASEAN countries would also be desirable.

## 6 | Limitations

Our study has several limitations. Including only four countries mean that the findings are not generalisable to all ASEAN countries. The method for this present study is document analysis and we have predominantly relied upon publicly stated and reported policies in documents. This means we cannot cover all policy documents and there might be differing interpretations regarding what was in the documents versus what happened on the ground. Further detail on the mandatory policies of the countries studied could be obtained through key informant interviews with government officials and members of the population subject to mandates, which would reduce reliance on policy documents and clarify on-the-ground implementation.


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### Ethics Statement

The authors have nothing to report.

### Data Availability Statement

The data that supports the findings of this study are publicly available in the native or English language documents cited in our reference list.

### References


Amit, A. M., V. C. Pepito, and M. Dayrit. 2021. "Early Response to COVID-19 in the Philippines." *Western Pacific Surveillance and Response Journal* 12, no. 1: 56–60. https://doi.org/10.5365/wpsar.2020.11.1.014.

Amul, G. G., M. Ang, D. Kraybill, S. E. Ong, and J. Yoong. 2022. "Responses to COVID-19 in Southeast Asia: Diverse Paths and Ongoing Challenges." *Asian Economic Policy Review* 17: 90–110. https://doi.org/10.1111/aepr.12362.

Associated Press. 2022. Traffic Jams Back in Philippine Capital as Officials Ease Pandemic Restriction. https://www.nbcnews.com/news/world/philippines-lifts-pandemic-restrictions-rcna18073.

Astro Awani. 2021. "Kekal Patuhi SOP Walaupun Diberi Kebenaran 'Dine-In'— MPKB." https://www.astroawani.com/berita-malaysia/kekal-patuhi-sop-walaupun-diberi-kebenaran-dine-mpkb-313358.

Astro Awani. 2023. "Court Rejects Ex-Soldier's Bid to Challenge Termination Over COVID-19 Vaccination." https://international.astroawani.com/malaysia-news/court-rejects-exsoldiers-bid-challenge-termination-over-covid19-vaccination-401526.

Attwell, K., and M. C. Navin. 2019. "Childhood Vaccination Mandates: Scope, Sanctions, Severity, Selectivity, and Salience." *Milbank Quarterly* 97, no. 4: 978–1014. https://doi.org/10.1111/1468-0009.12417.

Attwell, K., T. Harper, M. Rizzi, et al. 2021. "Inaction, Under-Reaction Action and Incapacity: Communication Breakdown in Italy's Vaccination Governance." *Policy Sciences* 54: 457–475. https://doi.org/10.1007/s11077-021-09427-1.

Attwell, K., M. Rizzi, L. McKenzie, et al. 2022. "COVID-19 Vaccine Mandates: An Australian Attitudinal Study." *Vaccine* 40, no. 51: 7360–7369. https://doi.org/10.1016/j.vaccine.2021.11.056.

Attwell, K., M. Rizzi, and K. T. Paul. 2022. "Consolidating a Research Agenda for Vaccine Mandates." *Vaccine* 40: 7353–7359. https://doi.org/10.1016/j.vaccine.2022.11.008.

Baclig, C. E. 2021. "Timeline: One Year of COVID-19 in the Philippines." https://newsinfo.inquirer.net/1406004/timeline-one-year-of-covid-19-in-the-philippines.

Bali, A. S., M. Howlett, J. M. Lewis, and M. Ramesh. 2021. "Procedural Policy Tools in Theory and Practice." *Policy and Society* 40, no. 3: 295–311. https://doi.org/10.1080/14494035.2021.1965379.

Boin, A., and M. Lodge. 2021. "Responding to the COVID-19 Crisis: A Principled or Pragmatist Approach?" *Journal of European Public Policy* 28, no. 8: 1131–1152. https://doi.org/10.1080/13501763.2021.1942155.

Boin, A., A. McConnell, and P. 't Hart. 2021. *Governing the Pandemic: The Politics of Navigating a Mega-Crisis*. Springer Nature. https://doi.org/10.1007/978-3-030-72680-5.

Burki, T. 2022. "COVID-19 Vaccine Mandates in Europe." *Lancet Infectious Diseases* 22, no. 1: 27–28. https://pmc.ncbi.nlm.nih.gov/articles/PMC8694743/pdf/main.pdf.

Cameron-Blake, E., H. Tatlow, B. Andretti, et al. 2023. "A Panel Dataset of COVID-19 Vaccination Policies in 185 Countries." *Nature Human Behaviour* 7: 1402–1413. https://doi.org/10.1038/s41562-023-01615-8.

Charrier, L., J. Garlasco, R. Thomas, P. Gardois, M. Bo, and C. M. Zotti. 2022. "An Overview of Strategies to Improve Vaccination Compliance Before and During the COVID-19 Pandemic." *International Journal of Environmental Research and Public Health* 19: 11044. https://doi.org/10.3390/ijerph191711044.

Chongsuvivatwong, V., K. H. Phua, M. T. Yap, et al. 2011. "Health and Health-Care Systems in Southeast Asia: Diversity and Transitions." *Lancet* 377, no. 9763: 429–437. https://doi.org/10.1016/S0140-6736(10)61507-3.

Chu, D.-T., S.-M. Vu Ngoc, H. Vu Thi, et al. 2022. "COVID-19 in Southeast Asia: Current Status and Perspectives." *Bioengineered* 13, no. 2: 3797–3809. https://doi.org/10.1080/21655979.2022.2031417.

Commission on Human Rights, Republic of the Philippines. 2021. "Statement of CHR Spokesperson, Atty Jacqueline Ann de Guia, on the Push to Make COVID-19 Vaccination Mandatory and Its Implications on People's Human Rights." https://chr.gov.ph/statement-of-chr-spokesperson-atty-jacqueline-ann-de-guia-on-the-push-to-make-covid-19-vaccination-mandatory-and-its-implications-on-peoples-human-rights/.

Department of Disease Control, Thailand. 2021a. "Guideline of COVID-19 Vaccine Administration for Health Care Worker." https://ddc.moph.go.th/vaccine-covid19/getFiles/11/1628849610213.pdf.

Department of Disease Control, Thailand. 2021b. "Thailand Situation Update on 1 December 2021." https://ddc.moph.go.th/viralpneumonia/eng/file/situation/situation-no692-011264.pdf.

Department of Disease Control, Thailand. 2023. "COVID-19 Vaccine Administration in Thailand as of 10th March 2023." https://ddc.moph.go.th/vaccine-covid19/getFiles/10/1678949903705.pdf.

Department of Information and Communications Technology, Philippines. 2021. "VaxCertPH." https://www.resilientlgus.ph/content/vaxcertph.

Department of the Interior and Local Government, Philippines. 2021. "DILG Urges LGUs to Accept Both VaxCertPH Digital Certificate or LGU Issued Vaccination Card Whichever Is Available." https://dilg.gov.ph/news/DILG-urges-LGUs-to-accept-both-VaxCertPH-digital-certificate-or-LGU-issued-vaccination-card-whichever-is-available/NC-2021-1216.

Djalante, R., J. Lassa, D. Setiamarga, et al. 2020. "Review and Analysis of Current Responses to COVID-19 in Indonesia: Period of January to March 2020." *Progress in Disaster Science* 6: 100091. https://doi.org/10.1016/j.pdisas.2020.100091.

Djalante, R., L. Nurhidayah, H. Van Minh, et al. 2020. "COVID-19 and ASEAN Responses: Comparative Policy Analysis." *Progress in Disaster Science* 8: 100129. https://doi.org/10.1016/j.pdisas.2020.100129.

Drew, L. 2022. "Did COVID Vaccine Mandates Work? What the Data Say." *Nature* 607, no. 7917: 22–25. https://www.nature.com/articles/d41586-022-01827-4.pdf.

Education Service Commission, Malaysia. 2021. "Panduan Menghadiri Temu Duga Suruhanjaya Perkhidmatan Pendidikan." https://www.spp.gov.my/images/MuatTurun/Panduan/Panduan%20Calon%20Temu%20Duga%20interim%20(hebahan).pdf.

Elengoe, A. 2020. "COVID-19 Outbreak in Malaysia." *Osong Public Health and Research Perspectives* 11, no. 3: 93–100. https://doi.org/10.24171/j.phrp.2020.11.3.08.

Elo, S., and H. Kyngäs. 2008. "The Qualitative Content Analysis Process." *Journal of Advanced Nursing* 62, no. 1: 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x.

Fauzi, M. A., and N. Paiman. 2021. "COVID-19 Pandemic in Southeast Asia: Intervention and Mitigation Efforts." *Asian Education and Development Studies* 10, no. 2: 176–184. https://doi.org/10.1108/AEDS-04-2020-0064.

Flick, U. 2022. *An Introduction to Qualitative Research*. Sage Publications.

Fu, J. Y. L., M. H. Pukhari, K. A. Dela Cruz, et al. 2024. "Charting the Path Forward in Southeast Asia: Learning From the COVID-19 Vaccination Challenges in Six ASEAN Countries." *Journal of Global Health* 14, no. 03016: 03016. https://doi.org/10.7189/jogh.14.03016.

Gibelli, F., G. Ricci, A. Sirignano, and D. De Leo. 2022. "COVID-19 Compulsory Vaccination: Legal and Bioethical Controversies." *Frontiers in Medicine* 9: 821522. https://doi.org/10.3389/fmed.2022.821522.

GMA News Online. 2022. "Missing Records, Data Errors Raised in Securing VaxCertPH." https://www.gmanetwork.com/news/topstories/nation/822370/missing-records-data-errors-raised-in-securing-vaxcertph/story/).

Government Electronic Information Portal. 2020. "Decision No. 170/QD-TTg of the Prime Minister: On the Establishment of the National Steering Committee for Prevention and Control of Acute Respiratory Infections Caused by New Strains of Corona Virus. https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=198963.

Government Electronic Newspaper. 2021a. "Handle the Responsibility of the Leader if There Is a Delay in Getting the COVID-19 Vaccine." https://baochinhphu.vn/xu-ly-trach-nhiem-nguoi-dung-dau-neu-de-cham-tre-tiem-vaccine-phong-covid-19-102297935.htm.

Government Electronic Newspaper. 2021b. "Tien Giang Province Is Still Making it Difficult for Businesses as if Resolution 128/NQ-CP Had Never Been Issued." https://baochinhphu.vn/tinh-tien-giang-van-lam-kho-doanh-nghiep-nhu-chua-he-co-nghi-quyet-128-nq-cp-102302508.htm.

Harian Metro. 2021. "Tak Lengkap Vaksin, Pelanggan, Pemilik Restoran Dikompaun." https://www.hmetro.com.my/mutakhir/2021/10/766804/tak-lengkap-vaksin-pelanggan-pemilik-restoran-dikompaun.

Health Council of the Netherlands. 2021. "Ethical and Legal Considerations COVID-19 Vaccination." https://www.healthcouncil.nl/binaries/healthcouncil/documenten/advisory-reports/2021/02/04/ethical-and-legal-considerations-covid-19-vaccination/Executive-summary-Ethical-and-legal-considerations-COVID-19-vaccination.pdf.

Ho Chi Minh City Media Centre. 2021. "Ho Chi Minh City: Workers are Excited to Return to Work After a Period of Quarantine." https://ttbc-hcm.gov.vn/tphcm-cong-nhan-phan-khoi-tro-lai-lam-viec-sau-thoi-gian-gian-cach-17903.html.

Inquirer.Net. 2022a. "COVID-19 Vax Cards Not a Requirement for Mall Entry in Alert Level 1 Areas—DILG. https://newsinfo.inquirer.net/1562724/fwd-dilg-no-need-for-vaccination-cards-at-mall-entrance-under-alert-level-1.

Inquirer.Net. 2022b. "DOH to Review Price Cap for RT-PCR Tests." https://newsinfo.inquirer.net/1540680/doh-to-review-price-cap-for-rt-pcr-tests.

Inter-Agency Task Force. 2021. "IATF Resolution 148B S2021." https://www.miaa.gov.ph/images/stories/MIAA-MC-OO-2020/20220222-IATF-Resolution-148-B-S-2021.pdf.

Jafar, A., R. Dambul, R. Dollah, N. Sakke, M. T. Mapa, and E. P. Joko. 2022. "COVID-19 Vaccine Hesitancy Malaysia: Exploring Factors and Identifying Highly Vulnerable Groups." *PLoS One* 17, no. 7: e0270868. https://doi.org/10.1371/journal.pone.0270868.

Jafar, A., R. Dollah, N. Sakke, et al. 2024. "Public Perception Toward the Malaysian National COVID-19 Immunisation Programme (PICK) in the State of Sabah, Malaysia: A Cross-Sectional Survey." *Disaster Medicine and Public Health Preparedness* 18: e43. https://doi.org/10.1017/dmp.2024.31.

Jitanan, M., T. Chirasatienpon, R. Tiamjan, et al. 2022. "Can Thailand Achieve COVID-19 Herd Immunity?" *Public Health Challenges* 1: 5. https://doi.org/10.1002/puh2.7.

Kaman, Z., and Z. Othman. 2016. *Validity, Reliability and Triangulation in Case Study Method: An Experience*. Qualitative Research Conference (QRC).

Khan, J. I., J. Khan, F. Ali, F. Ullah, J. Bacha, and S. Lee. 2022. "Artificial Intelligence and Internet of Things (AI-IoT) Technologies in Response to COVID-19 Pandemic: A Systematic Review." *IEEE Access* 10: 62613–62660. https://doi.org/10.1109/ACCESS.2022.3181605.

Krippendorff, K. 2018. *Content Analysis: An Introduction to Its Methodology*. Sage Publications.

Kyngäs, H., K. Mikkonen, and M. Kääriäinen. 2019. *The Application of Content Analysis in Nursing Science Research*. Springer. https://doi.org/10.1007/978-3-030-30199-6.

Leask, J., H. Seale, J. H. Williams, et al. 2021. "Policy Considerations for Mandatory COVID-19 Vaccination From the Collaboration on Social Science in Immunisation." *Medical Journal of Australia* 215, no. 11: 499–503. https://doi.org/10.5694/mja2.51269.

Lee, J. T., S. Sean Hu, T. Zhou, et al. 2022. "Employer Requirements and COVID-19 Vaccination and Attitudes Among Healthcare Personnel in the US: Findings From National Immunization Survey Adult COVID Module, August–September 2021." *Vaccine* 40, no. 51: 7476–7482. https://doi.org/10.1016/j.vaccine.2022.06.069.

Leung, L. 2015. "Validity, Reliability, and Generalizability in Qualitative Research." *Journal of Family Medicine and Primary Care* 4, no. 3: 324–327. https://doi.org/10.4103/2249-4863.161306.

MacDonald, N. E., S. Harmon, E. Dube, et al. 2018. "Mandatory Infant & Childhood Immunization: Rationales, Issues and Knowledge Gaps." *Vaccine* 36, no. 39: 5811–5818. https://doi.org/10.1016/j.vaccine.2018.08.042.

MalayMail. 2021. "Interstate Travel: Random Checks to Be Continued To Ensure SOP Compliance, Says Hishammuddin." https://www.malaymail.com/news/malaysia/2021/10/12/interstate-travel-random-checks-to-be-continued-to-ensure-sop-compliance-sa/2012891.

Marome, W., and R. Shaw. 2021. "COVID-19 Response in Thailand and Its Implications on Future Preparedness." *International Journal of Environmental Research and Public Health* 18, no. 3: 1089. https://doi.org/10.3390/ijerph18031089.

Masum, A., M. H. Ahmad, and S. M. M. Nafees. 2021. "COVID-19 and Freedom of Movement: A Case Study of the Malaysian Federal Constitution." *Legal Network Series, A* 1, no. xxiii: 1–17. http://irep.iium.edu.my/id/eprint/88454.

McKenzie, B. 2022. Thailand: Mandatory Vaccination—What Employers Should Know. https://insightplus.bakermckenzie.com/bm/employment-compensation/thailand-mandatory-vaccination-what-employers-should-know.

Mello, M. M., D. J. Opel, R. M. Benjamin, et al. 2022. "Effectiveness of Vaccination Mandates in Improving Uptake of COVID-19 Vaccines in the USA." *Lancet* 400, no. 10351: 535–538. https://doi.org/10.1016/S0140-6736(22)00875-3.

Merriam, S. B., and E. J. Tisdell. 2015. *Qualitative Research: A Guide to Design and Implementation*. John Wiley & Sons.

Minh, L. H. N., N. Khoi Quan, T. N. Le, P. N. Q. Khanh, and N. T. Huy. 2021. "COVID-19 Timeline of Vietnam: Important Milestones Through Four Waves of the Pandemic and Lesson Learned." *Frontiers in Public Health* 9: 709067. https://doi.org/10.3389/fpubh.2021.709067.

Ministry of Health. 2020. "MySejahtera Check-in." Malaysia. https://www.facebook.com/RAKYATMalaysiaSejahtera/photos/pb.100063891752823.-2207520000/194702675521539/?type=3.

Ministry of Health. 2021a. "All Information About 8 Types of COVID-19 Vaccines Licensed for Use in Vietnam. Vietnam." https://moh.gov.vn/tin-lien-quan/-/asset_publisher/vjYyM7O9aWnX/content/-infographic-toan-bo-thong-tin-ve-8-loai-vaccine-covid-19-a-uoc-viet-nam-cap-phep-su-dung.

Ministry of Health. 2021b. "Cara-Cara Memohon Sijil Digital Pengecualian Vaksinasi COVID-19 Bagi Individu Yang Tidak Boleh Divaksinasi Atas Masalah Kesihatan Tertentu. Malaysia." https://www.facebook.com/kementeriankesihatanmalaysia/posts/cara-cara-memohon-sijil-digital-pengecualian-vaksinasi-covid-19-bagi-individu-ya/227296102765734/.

Ministry of Health. 2021c. "From January 1, 2022: Quarantine for 3 days, Health Monitoring for 14 Days for Immigrants Who Have Received a Full Dose of Vaccine. Vietnam." https://covid19.gov.vn/tu-1-1-2022-cach-ly-3-ngay-theo-doi-suc-khoe-14-ngay-voi-nguoi-nhap-canh-da-tiem-du-lieu-vaccine-171211217112318054.htm.

Ministry of Health. 2021d. "Interim Guidance on Pre-Vaccination Screening for COVID-19 Vaccine for People 18 Years of Age and Older. Vietnam." https://thuvienphapluat.vn/van-ban/The-thao-Y-te/Quyet-dinh-5785-QD-BYT-2021-kham-sang-loc-truoc-tiem-COVID19-cho-nguoi-tu-18-tuoi-tro-len-498029.aspx#:~:text=Ng%C3%A0y%2021%2F12%2F2021%2C,mang%20thai%20d%C6%B0%E1%BB%9Bi%2013%20tu%E1%BA%A7n.

Ministry of Health. 2021e. "MySejahtera." Malaysia. https://www.facebook.com/photo/?fbid=366122505046221&set=pb.100063891752823.-2207520000.

Ministry of Health. 2021f. "Soalan Lazim Mengenai Vaksin Dan Imunisasi COVID-19." Malaysia. https://infosihat.moh.gov.my/penerbitan-multimedia/lain-lain/item/soalan-lazim-mengenai-vaksin-dan-imunisasi-covid-19.html.

Ministry of Health. 2022a. "Kenyataan Media Prosedur Kemasukan Ke Malaysia Bagi Pengembara Yang Pernah Dijangkiti COVID-19." Malaysia. https://covid-19.moh.gov.my/garis-panduan/gp-umum-covid19/prosedur-kemasukan-ke-malaysia-bagi-pengembara-yang-pernah-dijangkiti-covid-19.

Ministry of Health. 2022b. "Kenyataan Media YAB Perdana Menteri: Fasa Peralihan Ke Endemik." Malaysia. https://covid-19.moh.gov.my/reopeningsafely/media/2022/03/fasa-peralihan-ke-endemik.

Ministry of Information and Communication. 2021. "National Single App for COVID-19 Control PC-Covid Debuts." Vietnam. https://mic.gov.vn/mra/Pages/TinTuc/tinchitiet.aspx?tintucid=149017.

Ministry of Public Health. 2020. "Thailand's Experience in the COVID-19 Response." Thailand. https://ddc.moph.go.th/viralpneumonia/eng/file/pub_doc/LDoc9.pdf.

Ministry of the State Secretariat. 2020. "Presidential Decree No. 11/2020 on the Declaration of the National Public Health Emergency Corona Virus Disease 2019." Indonesia. https://www.fao.org/faolex/results/details/en/c/LEX-FAOC195050/.

Ministry of Transport. 2021. "What Conditions Do Passengers Need to Fly? Vietnam." https://baovephapluat.vn/giao-thong/hanh-khach-can-dieu-kien-gi-de-duoc-di-may-bay-113390.html.

MOHPROMT. 2021. COVID-19 Vaccine Management System Platform for Everyone in Thailand. https://mohpromt.moph.go.th/EN/mophic/.

Morgan, H. 2021. "Conducting a Qualitative Document Analysis." *Qualitative Report* 27, no. 1: 64–77. https://doi.org/10.46743/2160-3715/2022.5044.

MyGovernment. 2023. "MySejahtera Application." https://www.malaysia.gov.my/portal/content/31122.

National Academy for State Health Policy. 2024. *State Efforts to Limit or Enforce COVID-19 Vaccine Mandates*. United States. https://nashp.org/state-tracker/state-efforts-to-ban-or-enforce-covid-19-vaccine-mandates-and-passports/.

National Security Council. 2020. "Kenyataan Media Majlis Keselamatan Negara, Jabatan Perdana Menteri 18 Mac 2020." https://asset.mkn.gov.my/web/wp-content/uploads/sites/3/2020/03/PERGERAKAN-KAWALAN-COVID19-amended-18032020-UPDATED-12.12AM.pdf.

National Security Council. 2021. "FAQ Proklamasi Darurat 2021." https://asset.mkn.gov.my/web/wp-content/uploads/sites/3/2019/08/FINAL-FAQ-DARURAT-2021_compressed.pdf.

Neher, C. D. 1994. "Asian Style Democracy." *Asian Survey* 34, no. 11: 949–961. https://www.jstor.org/stable/2645346.

New Straits Times. 2021. "PM Muhyiddin Receives First COVID-19 Vaccine as Malaysia Kicks Off Mass Inoculation Campaign." https://www.straitstimes.com/asia/se-asia/pm-muhyiddin-receives-first-covid-19-vaccine-as-malaysia-kicks-off-mass-inoculation.

Nguyen, N. H., T. Van Nguyen, A. Q. Nguyen, P. Van Nguyen, and T. N. M. Nguyen. 2020. "The First Cohort of the COVID-19 Patients in Vietnam and the National Response to the Pandemic." *International Journal of Medical Sciences* 17, no. 16: 2449–2453. https://doi.org/10.7150/ijms.45449.

Van Nguyen, Q., D. A. Cao, and S. H. Nghiem. 2021. "Spread of COVID-19 and Policy Responses in Vietnam: An Overview." *International Journal of Infectious Diseases* 103: 157–161. https://doi.org/10.1016/j.ijid.2020.11.154.

Nguyen, V. M., F. Moi, L. Boonstoppel, H. T. Duong, C. C. Vien, and M. Van Hoang. 2024. "The Cost of Delivering COVID-19 Vaccines In Vietnam." *BMC Health Services Research* 24, no. 1: 779. https://doi.org/10.1186/s12913-024-11202-w.

NhanDan. 2022. Quang Ngai Strictly Punishes Officials and Civil Servants Who Refuse to Be Vaccinated. https://nhandan.vn/quang-ngai-xu-ly-nghiem-can-bo-cong-chuc-khong-chiu-tiem-vaccine-post686682.html.

Nur Hafizah Yusoff, Y., and S. Muhammad Ridhwan Sarifin. 2022. "Malaysians Perceptions to the National COVID-19 Immunization Program." *Malaysian Journal of Public Health Medicine* 22, no. 3: 225–233. https://doi.org/10.37268/mjphm/vol.22/no.3/art.1369.

Nurdin, M. R., A. Noveria, O. Shalih, and A. N. Mardiah. 2022. *National Response to the Global Pandemic of COVID-19: Evidence From Indonesia, Malaysia, and Vietnam*. Springer. https://link.springer.com/chapter/10.1007/978-981-16-7401-3_2.

Office of Consular Affair, Philippines. 2022. Restricted Entry of Unvaccinated Applicants in Malls Hosting DFA Consular Offices. https://dfa-oca.ph/advisories/restricted-entry-of-unvaccinated-applicants-in-malls-hosting-dfa-consular-offices/.

Official Gazette of the Republic of the Philippines. 2021. "Joint Administrative Order No. 2021-001." https://www.officialgazette.gov.ph/downloads/2022/01jan/20220124-JAO-2021-001-RRD.pdf.

Omer, S. B., C. Betsch, and J. Leask. 2019. "Mandate Vaccination With Care." *Nature* 571, no. 7766: 469–472. https://www.nature.com/articles/d41586-019-02232-0.

OneNews.PH. 2022. Unvaxxed not Allowed in Manila Cathedral. https://www.onenews.ph/articles/unvaxxed-not-allowed-in-manila-cathedral.

Park, C.-Y., K. Kim, M. Helble, and S. Roth. 2021. "Getting Ready for the COVID-19 Vaccine Rollout." *Adb Brief, No.* 166: 1–19. https://doi.org/10.22617/BRF210071-2.

Philippine News Agency. 2021. "Vaxxed Customers Get 'All-Access' Privilege in QC Malls." https://www.pna.gov.ph/articles/1156961.

Pijpers, J., A. van Roon, C. van Roekel, et al. 2023. "Determinants of COVID-19 Vaccine Uptake in the Netherlands: A Nationwide Registry-Based Study." *Vaccines* 11, no. 1409: 1–15. https://doi.org/10.3390/vaccines11091409.

Politico. 2021. "WHO Cautions Against Mandatory Vaccination." https://www.politico.eu/article/who-cautions-against-mandatory-vaccination/.

Prime Minister's Office. 2020. "Perutusan YAB Tan Sri Muhyiddin Hj Mohd Yassin Perdana Menteri 18 Mac 2020." https://www.pmo.gov.my/ucapan/?m=p&p=muhyiddin&id=4838.

Prime Minister's Office. 2021a. "Kelonggaran Prosedur Operasi Standard (SOP) Dan Peralihan Fasa." https://covid-19.moh.gov.my/faqsop/pelan-pemulihan-negara/2021/09/kenyataan-media-yabpm-dsisy-15092021.

Prime Minister's Office. 2021b. "Kenyataan Media Pejabat Perdana Menteri." https://www.pmo.gov.my/wp-content/uploads/2021/06/Kenyataan-Media-PMO-Pelaksanaan-Total-Lockdown.pdf.

Prime Minister's Office. 2021c. Pengumuman Khas Darurat YAB Perdana Menteri. https://www.pmo.gov.my/ucapan/?m=p&p=muhyiddin&id=4632.

Prime Minister's Office. 2021d. Teks Ucapan YAB Perdana Menteri Dato' Sri Ismail Sabri Yaakob 10 Oktober 2021. https://www.pmo.gov.my/wp-content/uploads/2021/10/10OKTOBER2021FINAL-TEKS-UCAPAN-YAB-PERDANA-MENTERI-KEBENARAN-RENTAS-NEGERI.pdf.

Prime Minister's Office. 2021e. Teks Ucapan YAB Perdana Menteri Kemudahan-kemudahan Bagi Individu Yang Telah Menerima Vaksinasi Lengkap. https://www.pmo.gov.my/ucapan/?m=p&p=muhyiddin&id=4677.

Public Service Commission, Malaysia. 2021. "Pengumuman Syarat Vaksinasi Lengkap Bagi Menghadapi Temu Duga Secara Bersemuka." https://www.spa.gov.my/spa/laman-utama/pengumuman-terkini/4818-hebahan-syarat-vaksinasi-lengkap-bagi-menghadiri-temu-duga-spa-secara-bersemuka.

Public Service Department, Malaysia. 2021. Dasar Pelaksanaan Imunisasi COVID-19 Bagi Pegawai Perkhidmatan Awam Persekutuan. https://docs.jpa.gov.my/docs/pp/2021/pp042021.pdf.

Rajatanavin, N., T. Tuangratananon, R. Suphanchaimat, and V. Tangcharoensathien. 2021. "Responding to the COVID-19 Second Wave in Thailand by Diversifying and Adapting Lessons From the First Wave." *BMJ Global Health* 6, no. 7: e006178. https://doi.org/10.1136/bmjgh-2021-006178.

Ramli, D., J. Adi, P. J. Eko, et al. 2022. "Perception of Youth in East Malaysia (Sabah) Towards the Malaysia National COVID-19 Immunisation Programme (PICK)." *Journal of Public Health and Development* 20, no. 1: 203–217. https://doi.org/10.55131/jphd/2022/200116.

Rampal, S., L. Rampal, V. J. Jayaraj, et al. 2021. "The Epidemiology of COVID-19 in Ten Southeast Asian Countries." *Medical Journal of Malaysia* 76, no. 6: 783–791. https://e-mjm.org/2021/v76n6/epidemiology-of-COVID-19.pdf.

Reuters. 2021. Philippines to Require Vaccination for Employees Working On-Site. https://www.reuters.com/world/asia-pacific/philippines-require-vaccination-employees-working-on-site-2021-11-12/.

RMIT University Vietnam. 2021. "PC-COVID App for RMIT Campus Access." https://www.rmit.edu.vn/content/dam/rmit/vn/en/assets-for-production/documents/pdfs/events/pc_covid_app_instruction_for_rmit_access.pdf.

Rose, J., and C. W. Johnson. 2020. "Contextualizing Reliability and Validity in Qualitative Research: Toward More Rigorous and Trustworthy Qualitative Social Science in Leisure Research." *Journal of Leisure Research* 51, no. 4: 432–451. https://doi.org/10.1080/00222216.2020.1722042.

Royal Thai Embassy, Canberra. 2021. "Requirements for Entering Thailand Under Phuket Sandbox Programme." https://canberra.thaiembassy.org/phuket-sandbox/.

Schneider, A., and H. Ingram. 1993. "Social Construction of Target Populations: Implications for Politics and Policy." *American Political Science Review* 87, no. 2: 334–347.

Selvarajah, S., A. Amer Nordin, M. S. J. Mohd Nor Sham, N. Saad Kunusagaran, and N. I. Ahmad Shauki. 2023. *Country Case*

*Study: Malaysia Knowledge Generation and Exchange Related to Preparedness and Response to the COVID-19 Outbreak*. World Bank. https://thedocs.worldbank.org/en/doc/87b5ed4c9067a8838e783c9ad68a4829-0070012023/original/Malaysia-case-study.pdf.

Sim, I. T. M., S. K. Khor, and S. C. T. Chern. 2022. "Omicron in Southeast Asia: Vaccines, Politics and Health Reform." https://southeastasiacovid.asiasociety.org/omicron-in-southeast-asia-vaccines-politics-and-health-reform/.

Singh, A. J., and S. Ravikumar. 2018. "Newspaper Citation in Scholarly Publications: A Study on Financial Times Newspaper During 2001–2010 as Reflected in Web of Science." *Library Philosophy and Practice (e-journal)*: 1650. https://digitalcommons.unl.edu/libphilprac/1630.

Spot.PH. 2021. "QC Malls Must Check Vaccine Cards Upon Entry: Mayor Belmonte." https://www.spot.ph/newsfeatures/culture/102164/qc-malls-vaccination-card-required-at-entry-a4373-20211018.

Sprengholz, P., L. Korn, S. Eitze, et al. 2022. "Attitude Toward a Mandatory COVID-19 Vaccination Policy and Its Determinants: Evidence From Serial Cross-Sectional Surveys Conducted Throughout the Pandemic in Germany." *Vaccine* 40, no. 51: 7370–7377. https://doi.org/10.1016/j.vaccine.2022.01.065.

Sumriddetchkajorn, K., K. Shimazaki, T. Ono, T. Kusaba, K. Sato, and N. Kobayashi. 2019. "Universal Health Coverage and Primary Care, Thailand." *Bulletin of the World Health Organization* 97, no. 6: 415–422. https://doi.org/10.2471/BLT.18.223693.

Tang, K. H. D. 2022. "Movement Control as An Effective Measure Against COVID-19 Spread in Malaysia: An Overview." *Journal of Public Health* 30: 583–586. https://doi.org/10.1007/s10389-020-01316-w.

Tantrakarnapa, K., and B. Bhopdhornangkul. 2020. "Challenging the Spread of COVID-19 in Thailand." *One Health* 11, no. 2020: 100173. https://doi.org/10.1016/j.onehlt.2020.100173.

Tejero, L., R. R. Seva, B. J. Petelo Ilagan, and K. L. Almajose. 2023. "Determinants of COVID-19 Vaccination Decision Among Filipino Adults." *BMC Public Health* 23, no. 851: 851. https://doi.org/10.1186/s12889-023-15712-w.

Thai Embassy. 2021. "New Travel Restrictions for Vaccinated and Non-vaccinated; Bangkok, Pattaya, Hua Hin and Chiang Mai Sandbox Update." https://www.thaiembassy.com/weekly-updates/new-travel-restrictions-for-vaccinated-and-non-vaccinated-bangkok-pattaya-hua-hin-and-chiang-mai-sandbox-update.

The Coverage. 2021. "Vaccine Mandate for Those Who Will Be Travelling on the Airplane." https://www.thecoverage.info/news/content/2490.

The Independent. 2021. "Government Would Not Make Covid Vaccinations Compulsory, Javid Says." https://www.independent.co.uk/news/uk/politics/covid-vaccination-compulsory-austria-b1961669.html.

The Philippine Embassy in Singapore. 2022. "Guidelines for Travel to the Philippines (non-OFWs and Foreign Nationals)." https://www.philippine-embassy.org.sg/consular/visa/guidelines-for-travel-to-the-philippines-non-ofws-and-foreign-nationals/#:~:text=Travellers%20with%20NO%20BOOSTER%20shot,from%20an%20MOH%2Dapproved%20provider.

The Special Committee for Ensuring Access to COVID-19 Vaccine Supply. 2021. "National COVID-19 Immunisation Programme." https://www.covidlawlab.org/item/national-covid-19-immunization-programme/.

The Star. 2023. "Court Rejects Teachers, UM Staff's Bid for Judicial Review of Compulsory COVID-19 Vaccination." https://www.thestar.com.my/news/nation/2023/12/14/court-rejects-teachers-um-staffs-bid-for-judicial-review-of-compulsory-covid-19-vaccination.

Tintuc. 2021. "Quang Ninh: People Who Are Not Eligible for COVID-19 Vaccination Are Granted a Certificate." https://baotintuc.vn/dich-benh/quang-ninh-nguoi-khong-du-dieu-kien-tiem-vaccine-phong-covid19-duoc-cap-giay-xac-nhan-20211220090210764.htm.

Tran, T. P. T., T. H. Le, T. N. P. Nguyen, and V. M. Hoang. 2020. "Rapid Response to the COVID-19 Pandemic: Vietnam Government's Experience and Preliminary Success." *Journal of Global Health* 10, no. 2: 1–14. https://doi.org/10.7189/jogh.10.020502.

Triukose, S., S. Nitinawarat, and P. Satian, et al. 2021. "Effects of Public Health Interventions on the Epidemiological Spread During the First Wave of the COVID-19 Outbreak in Thailand." *PLoS One* 16, no. 2: e0246274. https://doi.org/10.1371/journal.pone.0246274.

Tuoitre. 2021. "FDI Enterprises Hope to Vaccinate 100% of Workers." https://tuoitre.vn/doanh-nghiep-fdi-mong-muon-tiem-vac-xin-cho-100-cong-nhan-2021091816451729.htm.

Tuoitre. 2022a. "Is COVID-19 Vaccination Mandatory or Voluntary?" https://tuoitre.vn/tiem-vac-xin-covid-19-bat-buoc-hay-tu-nguyen-20220606232146611.htm.

Tuoitre. 2022b. "Some Places Discipline Officials and Civil Servants Who Refuse to Get Vaccinated Against COVID-19 According to Regulations." https://tuoitre.vn/mot-so-noi-ky-luat-can-bo-cong-chuc-tu-choi-tiem-vac-xin-covid-19-theo-quy-dinh-nao-20220225230930 59.htm.

Vietnamese Government. 2021a. "On Issuing a Set of Criteria for Evaluating Safety Activities in Preventing and Controlling the COVID-19 Epidemic at Production and Commercial Business Facilities in Ho Chi Minh City." https://thuvienphapluat.vn/van-ban/Doanh-nghiep/Quyet-dinh-3328-QD-BCD-2021-Bo-tieu-chi-danh-gia-an-toan-COVID19-co-so-kinh-doanh-Ho-Chi-Minh-488538.aspx.

Vietnamese Government. 2021b. "On Organization of Passenger Transport Activities in 5 Sectors (Roads, Railways, Inland Waterways, Marine, Airlines) Ensuring Safe, Flexible Adaptation and Effective Control of the COVID-19 Epidemic." https://thuvienphapluat.vn/van-ban/Giao-thong-Van-tai/Quyet-dinh-1740-QD-BGTVT-2021-huong-dan-van-tai-hanh-khach-5-linh-vuc-dam-bao-dich-COVID19-489667.aspx.

Vietnamese Government. 2021c. "Promotion of Temporary Regulations on Pilot Organization of Road Passenger Transport Activities to Ensure Safe, Flexible Adaptation and Efficient Control of the COVID-19 Epidemic." https://thuvienphapluat.vn/van-ban/Giao-thong-Van-tai/Quyet-dinh-1777-QD-BGTVT-2021-to-chuc-van-tai-hanh-khach-duong-bo-an-toan-COVID19-490655.aspx.

Vietnamese Government. 2021d. "Resolution no. 86/NQ-CP on Urgent Solutions for COVID-19 Prevention and Control to Implement Resolution No. 30/2021/QH15 of the Government (Resolution 86)." https://vanban.chinhphu.vn/default.aspx?pageid=27160&docid=203815.

Vietnamese Government. 2021e. "Safe, Flexible Adaptation, Efficient Control of COVID-19 Epidemic." https://thuvienphapluat.vn/van-ban/The-thao-Y-te/Nghi-quyet-128-NQ-CP-2021-Quy-dinh-tam-thoi-thich-ung-an-toan-linh-hoat-dich-COVID19-490931.aspx.

Viskupič, F., D. L. Wiltse, and A. Badahdah. 2022. "Reminders of Existing Vaccine Mandates Increase Support for a COVID-19 Vaccine Mandate: Evidence From a Survey Experiment." *Vaccine* 40, no. 51: 7483–7487. https://doi.org/10.1016/j.vaccine.2022.08.014.

VOA. 2022. Philippines Walks Back Ban on Unvaccinated Travelers on Public Transportation. https://www.voanews.com/a/philippines-walks-back-ban-on-unvaccinated-travelers-on-public-transportation/6427803.html.

Vogel, G. 2023. "Do COVID-19 Vaccine Mandates Still Make Sense?" *Science* 379, no. 6637: 1072–1073.

World Health Organization. 2012. "Malaysia Health System Review." *Health Systems in Transition* 3, no. 1: 1–122. https://iris.who.int/bitstream/handle/10665/206911/9789290615842_eng.pdf.

Yin, R. K. 2009. *Case Study Research: Design and Methods*. Vol. 5. Sage Publications.