

## The journey of policies during the COVID-19 pandemic in Indonesia: a need of evidence-informed policy

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Although the coronavirus disease 2019 (COVID-19) pandemic has entered its third year, the research evidence is still limited. It causes a significant burden in almost all sectors including health, economy, social, and politics. Fast, accountable, and efficient policies are needed to overcome the crisis. The living guideline based on the recently updated data in the real-time condition is one of the best solutions to overcome this pandemic.<sup>1</sup>

At the beginning of the pandemic (early 2020), Indonesia reported zero COVID-19 cases, while some neighboring countries had already reported a few cases. The lack of rapid scientific surveys has spread many incorrect assumptions. For instance, Indonesia was immune to COVID-19 infection due to racial superiority, religious, and paranormal reasons. During that time, Indonesia had not even issued any form of travel restrictions and specific quarantine policies for travelers despite the increasing number of infections in the surrounding countries.<sup>2</sup> On March 2, 2020, President Joko Widodo officially reported the first two COVID-19 confirmed cases in Indonesia, and the number continues to rise. Since then, Indonesia began to notice the emergency of COVID-19 and started to issue various policies and actions. Unfortunately, some of them lacked research evidence. Here are some of the key health policies and actions taken by the National government that will be discussed further.

### Policy on early rapid detection of COVID-19

On March 19, 2020, the government announced massive COVID-19 testing on Indonesian citizens. The testing used a rapid antibody detection test, which provides faster results than the polymerase chain reaction (PCR) test. Unlike PCR as the gold standard that detects the presence of genetic materials of severe acute respiratory syndrome coronavirus 2, this rapid detection test targets the presence of antibodies

in the patients which is present 5 to 14 days after the symptoms appear. Thus, this test cannot detect any infection in the early phase and causes a significant false-negative result. Furthermore, the antibodies also appear in patients with a history of COVID-19 infection, giving a false-positive result.<sup>2,3</sup> Many “trial” local innovations to detect COVID-19, which have a lack of sensitivity and specificity data, have been endorsed and applied in mass transportation. Despite these limitations, this policy was issued by the government because Indonesia needed to quickly collect information to obtain the big picture of the national COVID-19 situation; meanwhile, the resources of PCR testing were still limited at that time.

### Policy on rapid medical response and public health aspects of COVID-19

In late March 2020, five professional organizations including the Indonesian Society of Respiriology (PDPI), Indonesian Heart Association (PERKI), Indonesian Society of Internal Medicine (PAPDI), Indonesian Anesthesia Expert Association (PERDATIN), and Indonesian Pediatric Society (IDAI) supported by the Indonesian Task Force for COVID-19 (Gugus Tugas Percepatan Penanganan COVID-19) and Ministry of Health Republic of Indonesia have issued the guidelines for rapid medical response and public health aspects of COVID-19 in Indonesia.<sup>2</sup> These guidelines focused on the protocol of COVID-19 diagnosis, treatment, and surveillance involving multidisciplinary teams. Moreover, it has been revised and updated four times based on the latest research evidence in January 2022.

### Policy on acceleration of COVID-19 vaccination

The vaccination program was begun on January 13, 2021, which was split into four phases, with healthcare workers receiving the first batch, followed by public servants and other citizens based on the risk of

infection. This strategy was done due to inadequate vaccine supply, limited healthcare workers, and the anti-vaccination movement. By February 2022, the vaccination program had reached around 185 million for the first dose and around 128 million for the second dose.<sup>4</sup> This achievement has made Indonesia as one of the world's top five countries with the highest vaccination coverage. During the Omicron variant surge, the government has also accelerated the booster program, prioritizing senior citizens and immunocompromised patients that was begun on January 12, 2022.<sup>5</sup> This booster vaccination has been used as a requirement for local travelers using mass transportation. The rationale for this includes limited evidence showing a decline in vaccination protection over time and concerns on other breakthrough infections like the previous Delta variant.

#### **Policy on educational sector during the pandemic**

In the early phase until the second wave of the pandemic, the Ministry of Education only allowed online learning. After the declining cases following the second wave, dissemination of vaccination, and many debatable discussions with professional organizations, face-to-face learning (PTM) has been allowed based on local active cases, the level of restrictions toward community activities (PPKM), and school condition. The implementation of limited PTM is monitored and evaluated periodically. The Indonesian Pediatric Society recommended limited PTM in schools with the requirement that all (100%) teachers, staff, and students are fully vaccinated against COVID-19. Children with comorbidities should consult with a pediatrician before joining the PTM. Strict action such as the temporary suspension of this limited PTM for 14 x 24 hours will be taken if there is a clustered COVID-19 transmission in the school, and the positivity rate of active case finding exceeds 5%.<sup>6</sup> For instance, in February 2022, limited PTM was halted after 135 students and teachers in Jakarta contracted the disease. Furthermore, limited PTM is restricted to 50% of the class capacity during the Omicron variant surge.<sup>5</sup>

#### **Policy on quarantine for travelers**

After the striking positive cases in the first wave, the Indonesian government finally closed the international border to prevent the transmission of diseases. Indonesia then has started to open the

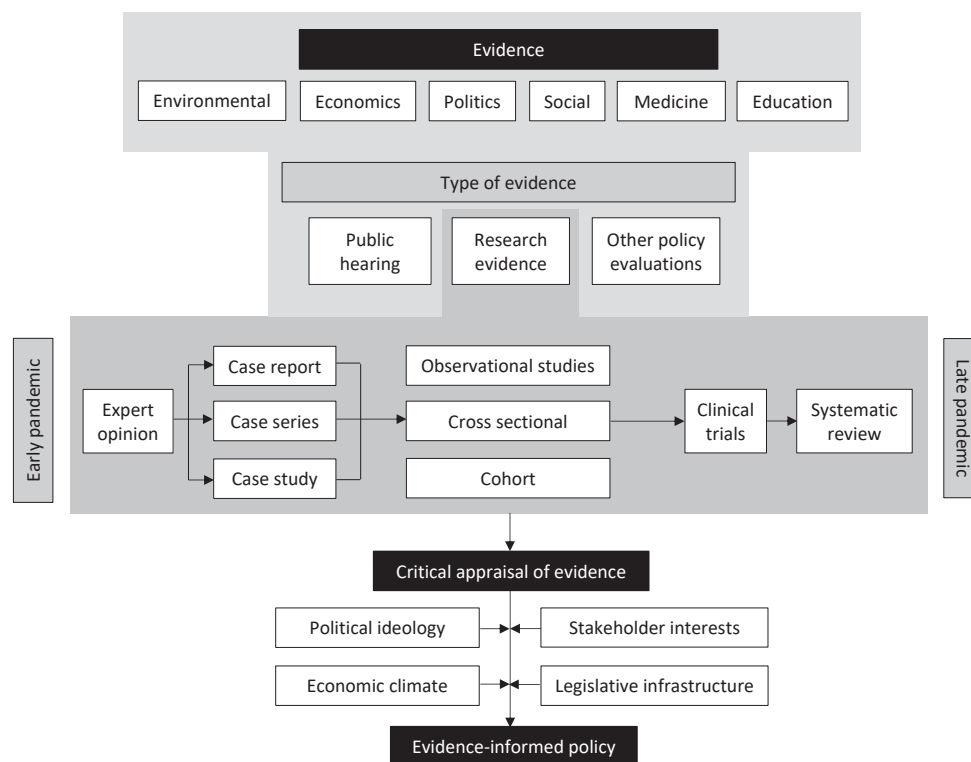
international border after a decline in the international and local cases. Learning from other countries, the Indonesian COVID-19 Task Force had established strict regulations with law policy on quarantine zones and mandatory RT-PCR for travelers coming to Indonesia.<sup>6</sup> The quarantine period has been evaluated based on global active cases, i.e., a longer quarantine period during the surge of Delta and Omicron variant cases worldwide.

#### **Evidence-informed policy**

Based on the journey of health policy above, a same lesson could be learned. The lack of research evidence constructed in Indonesia results in early ineffective decision-making. Although most policies are currently made based on evidence, some are inadequate. Thus, evidence-informed policies might be the solution. In medicine, the decision-making process was previously based on clinical guidelines and experts' experience. In 1990, criticism about that process rose and was followed by the development of a new principle called evidence-based medicine (EBM).<sup>7</sup> EBM is a concept to perform medical practices using the current best scientific evidence.<sup>8</sup>

As the movement of EBM continues to grow, it expands beyond its original scope from determining effective clinical treatment for patients in a given condition to ensuring policymaking is rooted in the best available research evidence, particularly in a broader context such as public health policy. This is called evidence-informed policy. The World Health Organization endorses the term "evidence-informed policy" rather than "evidence-based" because research evidence is not the only factor contributing to the policy-making process. Other factors should also be considered, including economic climate, political ideology, legislative/policy infrastructure, stakeholder interests, etc. Evidence-informed policy helps increase transparency, rationalization, accountability, and efficiency of the health policy.<sup>9</sup>

In early pandemic, due to the limited number of evidence, policies are mainly based on expert opinion, public, other policy evaluations, and early evidence such as case reports, case series, and observational studies. However, in late pandemic, more evidence is available, such as clinical trials or systematic reviews. Other contributing factors including economic climate, political ideology, legislative/policy infrastructure, and stakeholder interests are also considered (Figure 1).



**Figure 1.** The conceptual model of evidence-informed policy. Evidence should not be only in medicine but also in other fields. The type of evidence is varied based on the available evidence at that time and should be updated regularly as a living guideline. The evidence themselves should be appraised by the teams of policymakers and should account others factors to generate evidence-informed policy

There are three principles to generating evidence-informed policy. First, it should have sufficient evidence, not only scientific but also statistics, public hearings, and other policy evaluations. Moreover, community research beyond the medical field is needed to generate robust evidence for the health policymaking. On the other hand, policymakers should also critically appraise the evidence to avoid misused evidence presented by group interests. Second, policymakers’ response to the research evidence should consider the timing and importance of the problem and alternative policies to address the problem. Third, the connection between researchers and policymakers should be established by having intermediaries to help gain all research used in policymaking. These intermediaries could also be played by people who have access to both research groups and government institutions.<sup>10</sup>

In conclusion, managing the impact of COVID-19 pandemic involves many aspects and beyond medicine. Thus, comprehensive policies covering both the health and non-health sectors are needed. In accordance with the evidence-informed policy, research evidence

and other factors including economic climate, political ideology, legislative/policy infrastructure, and stakeholder interests are equally important in the policy-making process. Every country should ensure that the policies are transparent, adaptive to the rapid changing of COVID-19, and based on the recently updated evidence to attain all stakeholders and public engagements.

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