Rapid Assessment: Impact of COVID-19 Pandemic on Immunization Services in Indonesia
Indonesia’s first COVID-19 cases were confirmed in early March 2020. Within a month, cases were identified across all 34 provinces, and as of 16 May 2020, a total of 17,025 cases have been confirmed. Although the capital Jakarta and other densely populated cities have been profoundly impacted, the infection has also been transmitted to remote rural areas.

In the absence of aggressive public health interventions, an estimated 2.5 million cases would require hospitalization, with up to 250,000 deaths in Indonesia, and millions of children and their families will become vulnerable.\(^1\)

The COVID-19 pandemic threatens to erode Indonesia's recent child health and development gains. Immediate effects on an overwhelmed health system will be compounded by capacity gaps related to sickness and death among health workers. With high baseline vulnerabilities, including poor hygiene standards, immunity gaps and undernutrition, any decline in essential services risks a spiral of preventable mortality.

The government of Indonesia has taken several measures to ensure the containment of the virus and reinforce the capacity of the health system to manage such a pandemic. This has included physical distancing measures and interventions to limit the disease’s spread, such as isolation of suspected cases of infections, restrictions on domestic and international travel, bans on group and crowd gatherings, and the closure of schools, factories, restaurants, and public spaces. Recently, the government has announced large-scale social restrictions (PSBB) throughout the month of Ramadan, which includes travel restrictions to ban on the religious congregations.\(^2\)

Coverage of immunization and essential maternal–child health is at risk. Physical distancing measures have already led to temporary closure and/or service suspensions among integrated outreach sessions (posyandu) and community health centres (puskesmas) across much of the country – the backbone of routine maternal, newborn and child services.

The national immunization program data has already shown a decline in vaccination coverage; measles, and rubella has decreased by 13% in between January to March 2020, compared to last year during the same period,\(^3\) indicating thousands of children will be at risk of increased morbidity and mortality from vaccine-preventable disease outbreaks (VPDs).

A recent immunization perception survey in Indonesia shows there is a high demand for safe and timely vaccination services during the COVID-19 outbreak. Respondents strongly support government policy to continue the immunization services with safety precautions.\(^4\)

To mitigate the impact of COVID-19 on essential health service delivery, the Ministry of Health (MOH) issued guidelines, circulars and information, education and communication (IEC) materials to continue immunization services based on global guidance issued by the World Health Organization (WHO). These materials emphasize continuing routine immunization services while maintaining physical distancing and other infection prevention and control measures. The recommendations are also in line with a recently conducted study in Africa that found that the health benefits of deaths prevented by sustaining routine childhood immunization far outweigh the excess risk of COVID-19 deaths associated with vaccination clinic visits.\(^5\)

The MOH guidelines also advised local governments to consider their local contexts as well as weigh the risks and benefits while making decisions regarding the closure of posyandu and puskesmas.
Impact of COVID-19 on Immunization Services in Indonesia

To better understand the effects of COVID-19 on immunization services, the MOH, with technical support from UNICEF, conducted a rapid assessment at different levels of the health system. The aim of this exercise was to identify gaps, gather perceptions of health workers, prepare for the resumption and safe scale up of immunization activities, and tailor interventions to reach vulnerable communities.

From 20 to 29 April 2020, a total of 5,329 of 9,993 puskesmas participated in the online survey, with a completion rate of 89%, covering 388 of 540 districts and cities across all 34 provinces in the country.

The survey found that in nearly 84% of the reporting health facilities, immunization services are significantly disrupted due to the COVID-19 outbreak and current government policy of physical distancing measures.

More than 56% of respondents report that immunization services are affected both at puskesmas and posyandu levels in their areas.

The immunization services in Indonesia have been adversely impacted by the COVID-19 pandemic, and there is a potential risk of vaccine-preventable diseases outbreaks if immunization services are not reinforced by incorporating the local knowledge and available resources.
Cumulatively, immunization services are disrupted in more than 90% of total posyandu and 65% of total puskesmas. While many puskesmas continue to offer immunization services during the COVID-19 pandemic, many others are either interrupted partially or have shut down the immunization services completely.

The immunization service interruption is caused by various reasons, such as the inadequate understanding of the MOH guidance, high risk of local transmission of COVID-19 in the reported puskesmas areas, insufficient funds as a result of diverting support to the outbreak response plan, a limited number of dedicated vaccinators who are further diverted to tackle COVID-19 pandemic, transport disruptions due to travel restriction, and closure of schools.
Health workers are very apprehensive that children are missing vaccinations due to the COVID-19 pandemic. Health personnel understand the risks of VPD outbreaks and the implications of such diseases on the lives of the vulnerable children and on the health systems.

Most health workers are highly motivated to continue vaccinating children at posyandu and puskesmas by maintaining physical distancing and other safe precaution measures, with many suggesting reorganizing immunization services at health facilities to ensure safe practices. All parents/caregivers are asked to maintain physical distancing, use masks, and wash hands with soap before and after the sessions.

Health workers are afraid of being infected due to the limited availability of personal protection equipment (PPEs) required for safe vaccination practices. There are also concerns that many community members have just returned from cities with a high prevalence of COVID-19, with the impression that the majority of caregivers do not reveal their exposure or comply with the national guideline of 14 days of self-isolation. Many volunteers who assist with outreach sessions as well as caregivers and parents are reluctant to use masks properly.

Health workers are also worried about adverse events following immunization (AEFI), such as fever, which may be coincidental. In such rare occurrences, the health workers fear that they could be blamed or threatened and that the community may distrust or avoid the vaccination services.

Many communities understand the benefits of vaccination, trust their health facilities, workers, and rely on government instructions. However, caregivers are anxious about contracting COVID-19, and their fears outweigh their willingness to bring the children for immunization.
Most health workers have an excellent understanding of catch-up activities during the recovery phases of the outbreak response plan. Restoration of the routine immunization services, along with house-to-house sweeping and vaccination, are planned to be conducted as soon as the social distancing measure is lifted. Many health workers intend to reschedule immunization services at both fixed and outreach sites, such as increasing frequency of vaccination days, dedicated hours for vaccination only, organize special sessions on a weekend to avoid crowds to minimize further risk of infection. Health workers are familiar with the defaulter tracking guideline and tools, which will be reinforced at various levels.

Midwives and private clinics are identified as important sources of information about the newborns while the community volunteers and leaders will be engaged to prepare the list of children missing immunization.

However, understanding of the community perception on immunization services during acute and recovery phases is not well defined.

“Funds for the immunization program can’t be diverted to COVID-19 activities but should be utilized later; because immunization officers must do sweeping from house to house to screen the children and vaccinate them”

– Respondent

“Divide service schedules by urgency to avoid crowd on the day of service.”

“Immunization services will be carried out in the village hall where the place is wide enough to manage the distance.”

- Respondents
The survey illustrates that it is important to bring communities' trust back in the health systems.

In response to the survey and mitigate the risk of VPD outbreaks, the MOH has identified the following strategies:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Interventions</th>
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<tbody>
<tr>
<td>Safe Immunization Practices</td>
<td>As an immediate response to the survey, the MOH developed a guideline on the delivery of safe immunization practices during the COVID-19 pandemic. The guidelines were socialized to all 34 provinces in early May 2020. A follow-up survey is planned by the MOH in June/July 2020 to review the implementation of the guidelines and assess the continuity of immunization services.</td>
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| Defaulter tracking system             | • Use of community volunteers and leaders to record all children who have missed vaccinations  
• Data collection from the private facilities and community midwives about newborns and the contact information of their parents |
| Reorganization of immunization services | • Restoration of immunization services at fixed and outreach sites  
• Outreach sessions for immunization services to avoid mass gatherings  
• Increase frequency of service days, schedule/village queues |
| Communication                         | Use of social media such as WhatsApp, Facebook, Messenger and Instagram to deliver messages on the importance of immunization |
| Coordination and community engagement | Involvement of local leaders, community midwives, and cadres to improve utilization of immunization services |

References: