Commentary

Inequalities in COVID-19 disruption of routine immunisations and returning to pre-COVID immunisation rates

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As the world continues to navigate the unprecedented impact of the COVID-19 pandemic, in the absence of effective treatments and curative pharmaceutical interventions, countries have resorted to behavioural measures to mitigate the impact of the pandemic. Widespread national and regional lockdowns, curfews, and social distancing have become the norm, with devastating consequences for all aspects of life, including public health. The pandemic has disrupted all essential health services. However, routine immunisation services are amongst the hardest hit, with a suspension of mass vaccination campaigns, low footfall across vaccination centres, and disruptions in global vaccine supply chains [1].

In this issue of The Lancet Regional Health – Western Pacific, a cross-sectional survey by Harris and colleagues [2] shows that 18 out of 19 participating countries in the Southeast Asia and Western Pacific regions reported disruption to routine immunisations across all age groups, with a median of 15 antigens disrupted per country. The authors further showed that DTP, measles, rubella, and inactivated polio vaccines were affected in 17 out of the 19 countries. The oral polio vaccine (OPV) was impacted in all 12 countries that routinely delivered the vaccine. These findings substantiate the extent of disruption and serve as a harbinger for future outbreaks of vaccine-preventable diseases in children as collateral damage of the pandemic. Preliminary evidence of dangerous immunity gaps worldwide is already coming to the forefront, evident from recent surges of measles and polio outbreaks in around 30 countries including Niger, Afghanistan, and Pakistan [3].

The study shows 6 out of 10 antigens in High-income countries (HICs) and 9 out of 10 antigens in Upper and Lower Middle-income countries (LMICs) being affected. This finding reaffirms the widespread setbacks in routine immunisation globally regardless of economic status. However, LMICs are under greater threat given their fragile health systems, and limited political and economic leverage for dealing with the dual problem of mitigating the pandemic and maintaining essential health services. Even pre-COVID-19, 70% of unvaccinated children lived in middle-income countries [4], with under-15 children in LMICs up to 15 times more likely to die than children in HICs [5]. Through disproportionately disrupting immunisation rates across LMICs, the pandemic has widened inequity in health outcomes between high and low-income countries. Without targeted support directed towards LMICs, children residing in these countries will continue to be denied vaccination and fall victim to debilitating diseases at even higher rates, causing decades of progress to unravel.

Furthermore, the authors also touch upon the intra-country variations in disruption, with seven countries reporting within-country heterogeneities in coverage rates on the basis of socioeconomic conditions, geographies, and ethnic disparities. This finding reinforces the importance of investigating nuanced effects in disruption at a sub-national level, often masked when looking at national or regional estimates. However, to understand the accurate picture of heterogeneity in coverage rates within countries, gender equity is a vital indicator that was missing from the authors’ analysis. Exploring the gendered dimensions of inequity has been embedded as a key goal in the Gavi 5.0 Strategy and Immunisation Agenda 2030 with a vision to ‘leave no-one behind with immunisation’ [6,7]. The COVID-19 pandemic is further deepening the pre-existent gender-based inequities. For instance, preliminary evidence from Pakistan shows that sub-regional gender inequities are rampant even today, especially in rural areas, with a considerably higher proportion of boys being vaccinated than girls. Furthermore, the mitigation strategies such as enhanced outreach activities to catch up children who missed immunisations during COVID-19 lockdowns are disproportionately vaccinating more boys than girls [8]. A common observation is that many times despite
a rhetorical focus on increasing equitable coverage for routine immunisation services, countries fall short in practically implementing this goal. For instance, the World Bank supported disbursement linked indicators (DLIs) to increase equitable coverage focus on overall vaccination coverage targets, without an emphasis on disaggregated progress by gender, income status, ethnicity (or other dimensions of inequity) [9,10]. Capturing data on equity indicators, including gender in immunisation coverage, is essential to adequately measure and address all dimensions of inequities and appropriately incentivise countries to achieve equity goals.

A key limitation to study results is the reliance upon the initial four months (February/March–May 2020) of the pandemic, making it less relevant to policymaking as the situation has evolved over the last year. With the increasing use of digital health technologies like Electronic Immunisation Registries, longitudinal tracking of data is a more robust alternative to investigating real-time changes in coverage rates, effective monitoring, and data-driven mitigation strategies.

The study contributes to the evidence-base regarding restoration of coverage rates to pre-COVID-19 levels. The findings showed that by June 2020, 29% of the countries had returned to pre-COVID-19 coverage. This adds to evidence showing a rebound of coverage rates shortly after easing of lockdown restrictions in other countries [11]. Recovery of immunisation coverage rates overtime, even for LMICs, is therefore achievable. However, as in Pakistan’s context, the recovery is primarily driven by intensive door-to-door vaccinations that are costly and hard to sustain. As countries begin to shift priorities from containing the pandemic to restoring immunisation services, the focus should be on sustainable interventions including rebuilding vaccine confidence and increasing immunisation uptake by caregivers. Systematic efforts to clearly communicate benefits of childhood immunisations, reduce infection risk, and promptly counter misinformation and rumours around vaccinations will go a long way in helping drive demand and encouraging caregivers to actively bring children to immunisation centres.

Authors’ contribution

SC developed the outline. SC and DAS jointly drafted and approved the final manuscript.

Declaration of Interests

We declare no competing interests.

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