



Strengthening Health Resilience in Zero-Dose Communities

AN ADVOCACY BRIEF



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Introduction

In the wake of the COVID-19 pandemic, the significant progress made in global vaccine coverage over the past few decades has been reversed, with 25 million children unvaccinated or under-vaccinated in 2021, 5% more than in 2019¹. That includes 18 million zero-dose children, or those who have not received a single dose of a diphtheria, pertussis, and tetanus (DPT) containing vaccine. Zero-dose children are often found clustered in marginalized communities within low- and middle-income countries (LMICs) that are especially vulnerable to disease outbreaks and other crises². This backslide in immunization coverage has been the result of a convergence of several different factors, including disruptions to the provision of and access to health services, and to the supply chain, and increasing politicization and vaccine nationalism, which have also contributed to rising vaccine hesitancy³. Another contributing factor has been the diversion of already-limited public health resources to fight COVID-19, which has left health systems around the world struggling to maintain routine immunization services⁴. To restore global immunization coverage and meet the Immunization Agenda 2030's target of reducing the number of zero-dose children by 50%⁵, communities and health systems will need strengthen their resilience so that they are prepared for future crises and health emergencies.

The term *health resilience* refers to “the capacity of health actors, institutions, and populations to prepare for and effectively respond to crises; maintain core functions when a crisis hits; and, informed by lessons learned during the crisis, reorganize if conditions require it⁶.” Having resilient individuals, communities, and health systems is critical to minimize the negative impact of health emergencies and promote positive health outcomes both during

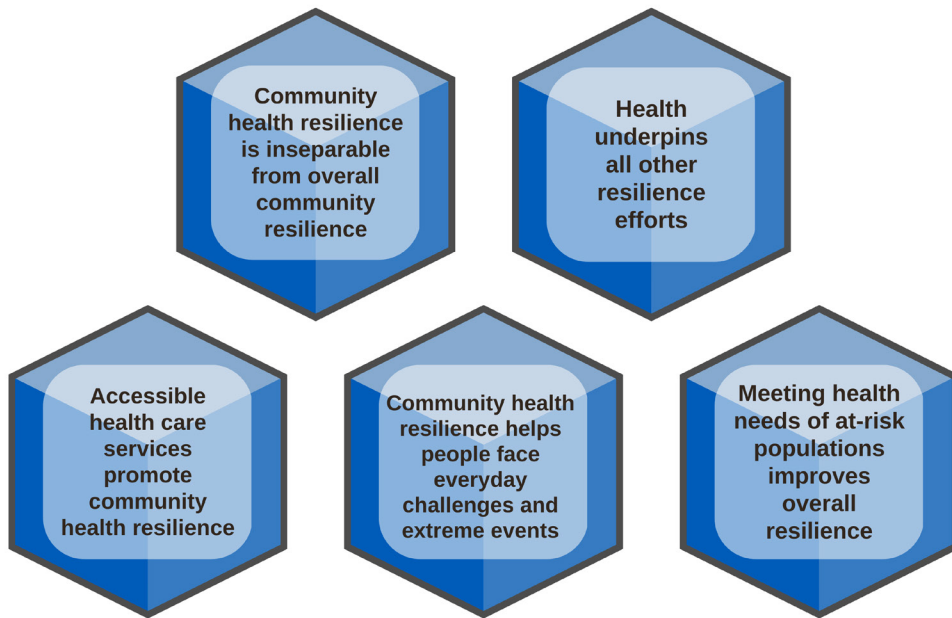
and after a crisis occurs. Strengthening health resilience by targeting zero-dose communities is essential to protect the most vulnerable communities, increase equitable access to health care, and ensure that no one is left behind.

Individual Health Resilience

At the individual level, *health resilience* can refer to how well a person is able to cope with, adapt to, and recover from a threat to their physical health⁷. By protecting individuals from vaccine-preventable diseases, as well as the potential cascading consequences of those diseases, such as undernourishment⁸ and antimicrobial resistance⁹, immunization is a prime example of an intervention that can effectively builds individual-level health resilience. Routine immunization also reaches 90% of the world's children – more than any other health intervention – and is the only intervention that brings families into contact with the health system five or more times during the first year of a child's life. Routine immunization can therefore be leveraged to provide a range of integrated primary health care (PHC) services to children and families, particularly those living in low-resource and hard to reach areas¹⁰, further strengthening their individual health resilience.

Community Health Resilience

Community health resilience refers to a community's capacity to prepare for, withstand, and adapt to threats, which in turn helps strengthen the health resilience of the individuals living within the community¹². Efforts to strengthen health resilience among communities should focus on emergency preparedness, rather than only as a response during or after a crisis.



Building Blocks of Community Health Resilience, Adapted from Wulff et al., 2015¹¹

Building community health resilience is also not just about increasing resilience in the health system, but also involves addressing the underlying negative social determinants of health, especially those affecting the health outcomes of the most vulnerable and marginalized communities. Key to this is to ensure all policies design, decision-making, implementation, and evaluation take a “whole-of-society” approach by engaging social services, community organizations, and businesses in the private sector¹³. Other key components of community health resilience include empowering trusted community partners in decision-making, building social connectedness, and ensuring that all policies are developed with “health for all” in mind.

Zero-dose children often live in communities facing multiple deprivations such as gender-related barriers, lack of official identity, or living beyond the reach of existing public services. Targeting zero-dose children can therefore be an effective approach to building health resilience within communities by identifying and addressing the underlying inequities experienced by

vulnerable and marginalized communities to ensure that no child is left behind in times of crisis.

Partnering with Communities to Strengthen Resilience

Building community health resilience requires a thorough understanding of the community’s unique social networks, structures, and determinants of health, which is only possible through effective community engagement. Civil society organizations (CSOs) are critical partners in assessing and strengthening community health resilience. This is exemplified by the progress led by the CSO Initiative, which engaged multiple CSOs to build trust between vulnerable communities and health authorities in countries from the WHO European Region during the COVID-19 pandemic¹³. The initiative was designed to ensure that communities were engaged in the decision-making process during an emergency, as communities are more likely to support policies and processes that they have been involved with, and in turn help build community resilience for the future. Forming relationships with CSOs

can represent an effective “bottom-up” approach to help identify and reach critical at-risk groups including zero-dose children living within marginalized communities.

Health System Resilience

A resilient health system is one that prepares for, adapts to, and recovers from a crisis, all while maintaining its core functions, such as delivery of routine immunizations¹⁴. Early research shows that many health systems during the COVID-19 pandemic were unprepared for and unable to adequately respond to shocks and emergencies when their health services were needed the most —most countries struggled with either partial disruptions to routine immunization services or suspension of these services entirely⁴. Experiences from health systems striving to reach zero-dose communities with immunization services, including during an outbreak, can offer useful insights on how to strengthen health system resilience to maintain health service provisions during emergencies. For example, adapting from Kruk et al.’s *Resilient Health System*



Framework for resilient health systems,
Adapted from Kruk et al., 2017¹⁴

*Framework*¹⁴ to include an immunization lens, five elements that make up a resilient health system can be identified:

- **Aware:** Decision makers must be aware of the scope of a disease outbreak as well as the status of immunization programs, and parents must be aware of the importance of maintaining their child’s immunization schedule.
- **Diverse:** Rather than relying exclusively on primary or secondary health facilities as the sole venue for accessing immunization services, vaccines should be available in a range of health care settings, including tertiary hospitals, public or private pharmacies, and mobile outreach clinics.
- **Self-regulating:** When necessary, decision makers should be able to create or adapt immunization guidelines, such as protocols for prioritizing certain populations (e.g., pregnant women, the elderly), to contextualize delivery of life-saving vaccines.
- **Integrated:** Agencies and organizations drawn from both the private and public sectors must collaborate to maintain immunization services and enhance communication efforts to universally support and promote immunization.
- **Adaptive:** Programs must be able to adapt to unexpected challenges (e.g., modified clinic hours, task shifting to allow a wider range of health workers to administer vaccines or implementing personal protective equipment [PPE]) to optimize and make it easier for individuals to safely access immunization services.

Another fundamental aspect of building health system resilience is the ability to plan for post-event recovery¹⁵. After the 2014 outbreak of Ebola in West Africa, for example, WHO guidance included a recommendation to implement intensified vaccination activities acknowledging that catch-up campaigns for older children may

require additional resources and supplies (which may affect cold chain capacity)¹⁶. Reactivation plans that are proactively put in place and adequately resourced to restore and sustain routine health services such as immunization to pre-crisis levels are a key component of improving health system resilience. Developing a national recovery plan that prioritizes targeting zero-dose children and their communities will not only build health system resilience, but also ensure that prior gains in public health are not lost and advances toward equitable access to health are continued⁵.

Everyday Resilience

The critical need for a resilient health system is clearly evident during crises and emergencies like the scale seen in the COVID-19 pandemic, but it is also important to recognize the benefits of building “everyday resilience” by addressing chronic stressors to a health system¹⁷. For example, health systems within LMICs routinely face persistent challenges such as low domestic investments into health worker training and capacity, weak disease surveillance and diagnostic systems, and unstable leadership¹⁸. Addressing these chronic stressors would help build everyday resilience of health systems, in turn enabling them to more effectively and equitably provide basic health care services to everyone who needs them, particularly vulnerable and marginalized groups like zero-dose communities. Strategies to strengthen everyday resilience is not just about ensuring that adequate resources and health workers are available, but also relying on the implementation of effective planning processes, enhanced leadership capacities, and healthy power dynamics¹⁹. For example, an intervention to build everyday resilience focused on training health system managers in Kenya in order to improve communication skills, develop trust in the workplace, and enhance problem-solving ability²⁰.

THE ROLE OF PREPAREDNESS

The COVID-19 pandemic has highlighted the need for health systems to be better prepared for future crises. *Preparedness* refers to “the ability of governments, professional response organizations, communities, and individuals to anticipate, detect, and respond effectively to, and recover from, the impact of likely, imminent, or current health emergencies, hazards, events, or conditions²¹.” A health system’s level of preparedness directly impacts its resilience. Too often, health systems can only *react* to a crisis once it has occurred; resilient health systems are better prepared for a crisis and respond *proactively*.

The Global Health Security (GHS) Index²¹ utilizes publicly available data from governments and organizations to measure countries’ capacity to respond to disease outbreaks, information which is crucial to identify gaps in a country’s preparedness and allocate resources most effectively. The latest GHS Index was prepared with data collected between August 2020 and June 2021. Analysis reveals that although many countries were able to respond to the COVID-19 pandemic quickly and effectively, all countries included in analysis remain inadequately prepared for future outbreaks. Notably, the GHS Index analysis revealed that “few countries recognize the importance of preparedness and response planning and communications for vulnerable populations²¹”.

To improve preparedness, the GHS Index recommends that any capacity-building in response to the COVID-19 pandemic should be sustained when possible; national budgets should prioritize health security capacities; and information about gaps in preparedness should be readily available for decision makers.

Recommendations

Individual-, community-, and health system-level resilience are intertwined — A resilient health system that can deliver health services equitably to all before, during and after an emergency will underpin strengthening the health resilience of the communities they serve, which will in turn would help address the underlying negative social determinants of health, and bolster the health resilience of the individuals living within those communities. Prioritizing reaching zero-dose children in health policies and emergency preparedness and response plans offer an effective way to build health resilience at all levels and addressing the challenge of reaching vulnerable and marginalized communities struggling with pandemic-related disruption to health services.

One strategy to strengthen health system resilience—and allow primary care like routine immunization services to continue even in times of crisis—is to implement integrated health service delivery (IHSD). IHSD refers to “an approach to strengthen people-centered health systems through the promotion of the comprehensive delivery of quality services across the life course, designed according to the multidimensional needs of the population and the individual and delivered by a coordinated multidisciplinary team of providers working across settings and levels of care²².” This will promote better alignment to reduce fragmented or siloed provision of services by pairing complementary services, such as family planning alongside other maternal child and health services. IHSD strategies that may be beneficial and improve intervention coverage in LMICs include integrating routine PHC into mobile health teams delivering vaccines and integrating testing labs and electronic medical records into the health system infrastructure²³, which may

increase availability during a health crisis, and developing a digital infrastructure for prevention, treatment, and follow-up of non-communicable diseases²².

Evidence from the literature also provides a few key lessons learned, such as the inherent value of coordinating activities between different levels of government and non-governmental stakeholders; ensuring that there are surge and risk-tolerance financing to address a crisis that can be flexibly deployed where needed; and having resilient, agile, and adaptable supply chain and service delivery infrastructure²⁴. Lastly, it is critical to establish robust surveillance and response systems that enable early detection and monitoring of outbreaks in real time, which will allow effective measures to be implemented immediately to contain the outbreak and limit its impact²⁵.

The experience and insights gained from the COVID-19 pandemic will be critical to inform current and future practices and priorities on health and emergency preparedness and response as countries, communities, and individuals progress toward recovery and building their health resilience. The central importance of health resilience and the need to strengthen it at many levels is underscored by the challenges faced by the growing number of zero-dose children who lack access to vaccines as well as other essential health services. It is critical that our efforts to build back better prioritize reaching zero-dose children and missed communities in the broader health and development agenda, especially because equitable access to routine immunization serves as a foundation to prevent outbreaks in the first place, and underpins pandemic prevention and preparedness.

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