


COVID-19 pandemic response in the WHO Eastern Mediterranean Region

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INTRODUCTION

The Eastern Mediterranean Region (EMR) is unique among the WHO global regions as more than half of the countries under its mandate are fragile conflict zone countries.^{1–14} The protracted absence of regional solidarity due to conflict and increased numbers of vulnerable people, mixed with a lack of global solidarity around vaccine access and distribution, hinders regional efforts to control the spread of SARS-CoV-2. Global, regional and national unity, in the form of collective action to stall the pandemic, is essential if control is to be achieved.

As of 5th April 2022, the EMR has surpassed 21 610 085 confirmed cases and 341 090 deaths, for a case fatality ratio of 1.6%. Being a nexus between East and West, high levels of labour migration, travel and trade through the Middle East facilitate the fast spread of disease outbreaks, particularly in the fragile conflict countries where majority of the world's disease outbreaks occur. The region represents only 9% of the global population, but a staggering 43% of the world's humanitarian needs.^{15–17} In fact, 64% of the world's refugees come from this region.⁸ Health indicators, such as the universal provision of essential health services, infant and maternal mortality, or trauma care, are among the worst in the world.^{16 17} These complex factors, combined with a weak public health system and marked regional heterogeneity in culture and finance, generate novel challenges for WHO and stakeholders as they respond to the COVID-19 pandemic and other concurrent health emergencies in the region.⁸

A COORDINATED RESPONSE EFFORT TO STALL THE PANDEMIC

In early 2020, the WHO Eastern Mediterranean Regional Office (EMRO) mounted a comprehensive and coordinated response effort to control the COVID-19 pandemic.¹⁷

Summary box

- ⇒ SARS-CoV-2 pandemic control is complex and challenging in the Eastern Mediterranean Region due to protracted conflicts, restricted inter-regional access, low availability of resources, inadequate health systems and limited political commitment.
- ⇒ Coordinated efforts manifested through “whole of government, whole of society” approaches are key to pandemic control. In EMR, such efforts are underway, including regional incident management systems, elaborate blueprints and roadmaps, and ministerial groups, all of which empower policymakers to share best practices and identify gaps in preparedness and response
- ⇒ Improving access to information, data, laboratory capacity and expertise, and support for genomic sequencing are critical to address changing dynamics of pandemics such as variations in the SARS-CoV-2 genome.
- ⇒ Strong regional, national leadership around equitable access to COVID-19 vaccines is essential if control or elimination of SARS-CoV-2 is to be achieved in the near future.

Key to the success of these efforts was a ‘whole-of-government, whole-of-society approach’ to prevention, preparedness, detection, response and recovery. This included the creation of a regional incident management system to coordinate the response and the development of a comprehensive regional plan (‘blueprint for the future’) to respond to this pandemic and beyond. In addition, a regional ministerial group was established to provide guidance to the overall pandemic response, share best practices and identify key gaps in the response.

Part of this new and comprehensive response was a plan to leverage and sustain an effective response to the COVID-19 pandemic, while building resilient health systems for improved preparedness and response. To this end, WHO EMRO fast-tracked the expansion of testing and laboratory capacity in all 22 countries and territories, facilitating the establishment



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of more than 600 new labs and institutionalization of quality assurance and quality control measures. This was possible by leveraging existing laboratory systems, particularly influenza surveillance programmes, polio assets and other networks. WHO also worked to develop a clinical concept of operations to guide national decision making around surges in COVID-19 cases in order to strengthen critical care capacity and accelerate the availability of oxygen and biomedical resources, including ventilators.

Although most of the middle-income and low-income countries received vaccines through COVAX, equitable access to vaccines was a challenge and many countries initially experienced a shortage of vaccines. There were incipient problems with infodemics and misinformation surrounding the safety and efficacy of vaccination, leading to pockets of vaccine hesitancy. As of 5th April 2022, more than 691 754 790 doses had been administered across all 22 countries and territories, with an average regional median dose rate of 93 doses per 100 population, lagging far behind the United Arab Emirates at 246 doses per 100 population and Morocco at 145 doses per 100 population.

CHALLENGES TO PANDEMIC RESPONSE IN THE EMR

Responding to COVID-19 in countries with complex humanitarian emergencies is difficult due to restricted inter-regional access, low availability of resources, weak health systems, and limited political commitment.

Some of the main challenges involved in operationalizing pandemic response in this region include:

1. *Free and transparent sharing of information.* Some countries are reluctant to share COVID-19-related information in a timely and efficient manner with WHO even though it is critical to share data freely for better analysis and planning.
2. *Enhancing early warning systems and sequencing capacity.* Half of the countries in the region are experiencing complex emergencies with chronic weaknesses in their surveillance systems. It is vital to enhance and invest in early warning surveillance for timely detection and response to any potential disease outbreaks. Weak genome sequencing capacity in the region has impacted the timely detection and monitoring of new variants of COVID-19.
3. *Protection of health workers.* During the COVID-19 pandemic, 7%–10% of all new cases occurred among health workers in the EMR, mainly due to inadequate or poorly enforced infection prevention and control (IPC).¹
4. *Increase capacity building for risk communication and community engagement (RCCE) at the national level, especially when introducing or adjusting public health and social measures (PHSMs) to increase awareness and overall adherence and compliance to these measures.* To increase capacity, WHO's partners must support RCCE workforce expansion in countries and support them to sustain the RCCE process through institutionalization, stron-

ger organization, integration and monitoring of behavioural outcomes.

5. *Demonstrated behaviour change.* Facemask use varies across the 22 EMR countries, ranging anywhere from 6% to 83% depending on the socioeconomic, political and cultural context and how PHSMs are enforced/applied.
6. *Vaccine equity.* Limited production capacity, inequities in global distribution, supply chain constraints, lack of country capacities for timely vaccine administration and hesitancy among the public are among the major challenges to achieve vaccine targets in the region.
7. *Improvements to critical care capacities and trauma care.* Despite years of trauma-related emergencies in several countries of the region, there are still inadequate trauma and critical care resources, making emergency response for severe and hospitalized COVID-19 cases intractable in some places.
8. *Maintain continuity of essential health services.* Seventy-five per cent of essential health services (EHS) were disrupted due to COVID-19-related costs and care requirements for 13 countries in the EMR.¹
9. *Establishing effective supply chain systems.* War, travel restrictions and economic sanctions fracture supply chain systems in the region, leaving countries unable to access personal protective equipment, intensive care unit equipment, ventilators, diagnostics and genomic sequencing.

ENDING THE CURRENT PANDEMIC

To control the COVID-19 pandemic in the EMR, it was vital to build and sustain collaboration, political commitment and strong coordination between governments, civil societies and multilateral actors at an advanced level of engagement; to allow for transparent, evidence-based communications crucial to the overall organization, administration and financing of the response. With these partnerships in place, communities and national governments were able to promote and adjust PHSMs to control transmission. In addition to being informed by appropriate data, PHSMs were applied in a way that was locally acceptable, feasible and effective.

Active community engagement was essential to the success of PHSM promotion and uptake and acceptance of COVID-19 vaccination. Local authorities and multisectoral partners continue to consult with social scientists and community leaders as they design behaviour change promotion activities to increase vaccine acceptance and uptake amongst the target population(s). Together with appropriate data, information and partnership, successful response also required active and transparent communication with communities via trusted leaders about their fears, worries and feelings in order to empower communities to engage in behaviour change that is effective and fits their localised needs.

Prior to the COVID-19 pandemic, several countries lacked reliable epidemiological surveillance systems supported by

strong data management, which led to poor compliance with International Health Regulations (2005). When surveillance systems were implemented via external partners in collaboration with community partners and national leadership, countries with limited resources were able to quickly install highly functional and effective outbreak detection systems that suited local needs and informed local decision making. Eventually, these key partners will need to shift resources to new emergencies leaving the country to self-train and finance to maintain core functionality of the surveillance system.

One way to ensure active participation in national surveillance is to empower and support governments to expand testing and in-country genomic sequencing capabilities rather than depending on regional or international laboratories. In order to improve these outcomes, countries engaged in a review and update of their testing and detection strategies and prioritized improvements in laboratory facilities, equipment, and technical expertise. Once this was completed, governments, together with multisectoral partners such as WHO, collaborated to expand testing and sequencing capabilities. These upgraded capabilities ensure countries can capture important data on SARS-CoV-2 variants that could cause increased spread, virulence, immune evasion, and/or severity of disease.

CONCLUSION

In places where vaccination coverage is poor (less than 10% of the population), the emergence of new SARS-CoV-2 variants may lead to outbreaks with pandemic potential.⁴ Scaling up vaccine coverage in the fragile conflict zone countries is vital if we are to generate equal opportunities for national and regional control of COVID-19 outbreaks and the spread of novel variants. With new variants of concern arising with each progressive wave of the SARS-CoV-2 pandemic, we must use the one universal tool we have to protect everyone, everywhere: vaccines. Mass vaccination has also been shown to prevent health system overload due to high morbidity, work shortages and unnecessary deaths, saving fragile health systems from imploding due to acute system stressors

To that end, it is apparent that 1) accurate and timely detection of SARS-CoV-2 variants and 2) strong regional leadership around access and provision of COVID-19 vaccination, are essential steps if we are to endeavour towards control and/or elimination of SARS-CoV-2 in the EMR.

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