

Strengthening hospital resilience in the Eastern Mediterranean Region

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“Adaptation is surviving but resilience is for thriving.”

In recent years, the multiple threats of COVID-19 and other disease outbreaks, intensified climate change and severe weather events, and increasing conflicts and humanitarian emergencies have highlighted the need to strengthen resilience in the different sectors, including social, economic, environment, and health (1-3). Resilience is the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management (4).

Hospitals are complex organizations which play a fundamental role in the provision of health services during health emergencies (5,6). The COVID-19 pandemic exposed the overwhelming pressures on hospitals and healthcare delivery systems generally, and the need for proactive preparedness, innovation, learning, collaboration, and community engagement for the preservation of health system functions and resources (3,7).

Resilient hospitals contribute to building stronger and more resilient health systems and healthy communities, and ultimately impact sustainable development (5). Health authorities, policymakers and scholars alike have agreed on the importance of strengthening hospital and health systems resilience, yet there is limited evidence and limited practical guidance for effective resilience strengthening in peer-reviewed literature (8,9). Building on the principles of disaster, community, organizational, and health systems resilience, this editorial conceptualizes the divergent aspects of hospital resilience using 4 questions, and outlines relevant considerations for operationalization (10).

1. Hospital resilience for what?

Hospitals are resilient when they maintain their functions and provide high-quality and continuous critical and

essential services amid crises caused by multiple hazards, while leaving no one behind (9). In 2015, 187 Member States adopted the Sendai Framework for Disaster Risk Reduction 2015–2030, which identifies safe and resilient hospitals as a global priority to increase access to healthcare services before, during and after emergencies, guided by people-centred and all-hazards approaches (11). Strengthening hospital resilience will ultimately help improve access to healthcare, reduce vulnerabilities and challenge inequalities, further contributing to the advancement of Universal Health Coverage (UHC), health security, and health equity (9,10,12).

2. Hospital resilience to what?

Informed by WHO's integrated approach to health emergency and disaster risk management (HEDRM), hospitals require a systematic, risk-informed and all-hazard approach to strengthening resilience to different types of hazards (12). They must continuously update their resilience plans, informed by regular multi-hazard risk assessments.

In the Eastern Mediterranean Region, hospitals are faced with multiple challenges and risks, including limited and maldistributed resources (human, financial and material), fragmentation of service delivery, weak health information systems, suboptimal governance arrangements, and low-quality services. These challenges and risks are exacerbated by the high number of humanitarian emergencies in the region (13-15). In 2022, 55 infectious disease outbreaks were reported from 19 of the 22 countries and territories in the Region, mostly from the fragile settings affected by conflicts and violence, where hospitals are struggling to adapt and respond to simultaneous disasters and emergencies (2). Within these contexts, challenges compound over time and limit the capacities of hospitals to respond to the needs of the populations they serve. Hospitals must demonstrate continuous resilience to maintain functionality.

3. Hospital resilience through what?

Strengthening hospital resilience as part of overall health systems resilience requires embedding hospital resilience in organizational culture, structure and management by mainstreaming HEDRM in routine hospital operations and integrating lessons learned from acute events (3,11,12). Hospitals should strengthen their absorptive, adaptive, transformative, and learning capacities throughout the prevention, preparedness, response, and recovery (PPRR) phases (9,10,13).

4. Hospital resilience of what?

Hospitals need both hard and soft resilience, defined by 6 interdependent components (the 6 Ss): space (including constructive and infrastructural resilience and agility), staff, stuff (finance, logistics and supply chains stuff), strategies and systems (including leadership and coordination, community engagement, communication, information, and learning), and service delivery (9,14). Strengthening leadership and capacitating hospital managers are critical steps for building hospital resilience in the Region (3,14).

Strengthening hospital resilience is embedded in, and intricately interdependent with, improving health systems and community resilience (9). A paradigm shift is required to transform hospitals in the Region towards integration, preparedness and sustainability and make them people-centred (14–16). Hospitals contribute to physical, political, sociocultural, and economic development of societies (15). They should empower communities and respond to their evolving needs while also reducing and mitigating their impact on the environment and contributions to climate change (14–16).

Moreover, and guided by a whole-of-society approach to advancing the dual goals of UHC and health security, it is crucial to integrate hospitals within multisectoral national health system plans, clearly defining their roles in fulfilling essential public health functions and their contributions to primary healthcare-oriented models of care, as highlighted in a resolution of the WHO Regional Committee for the Eastern Mediterranean adopted in October 2022 (2,6,11).

Strengthening hospital resilience contributes to WHO's mission and the EMR vision 2023 (17). To guide hospital managers, a hospital resilience conceptual framework and operational guidance embedded with specific tools has been developed, which interlinks resilience “through what” and “of what” with specific interventions for each of the 6S components across the PPRR stages (9,10). For instance, operationalizing hospital resilience necessitates that hospitals have risk-informed emergency preparedness and response plans, complemented by routine measures to ensure the integrity and agility of their structural, non-structural and functional elements (3,5,10). Plans should include institutional arrangements for managing emergencies of prioritized hazards, with clear allocation of roles and responsibilities among the management, clinical and support staff (11–13). Similarly, the role and contributions of hospitals must be integrated and embedded within national and subnational HEDRM and health systems resilience strategies (3,7,9,11,15). Furthermore, continually building the leadership and managerial capacities of hospital managers is a crucial strategy in disaster and emergency management (3,12,15).

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