

Summary report on the expert consultation on hospital resilience in the Eastern Mediterranean Region¹

Citation: World Health Organization. Summary report on the expert consultation on hospital resilience in the Eastern Mediterranean Region. East Mediterr Health J. 2023;29(1):73–74. <https://doi.org/10.26719/2023.29.01.73>

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Introduction

Lessons from the COVID-19 pandemic have highlighted the critical need to strengthen hospital and health systems to make them more resilient and better equipped to respond to health emergencies (1). The concept of hospital resilience is new and efforts have been made to conceptualize hospital resilience using different definitions (2).

Following the completion of a comprehensive regional mixed methods study (3), WHO/EMRO convened an expert consultation in May 2022 to obtain insights on hospital resilience, validate the draft framework on hospital resilience for the Eastern Mediterranean Region (EMR) and discuss interventions to operationalize and evaluate it (4). Present in the meeting were leading global and regional experts, including policymakers, hospital managers, academics, and representatives of WHO.

Summary of discussions

Findings on the conceptualization, operationalization and evaluation of hospital resilience were presented (3)

along with experiences of “resilience in action” and lessons in strengthening hospital resilience.

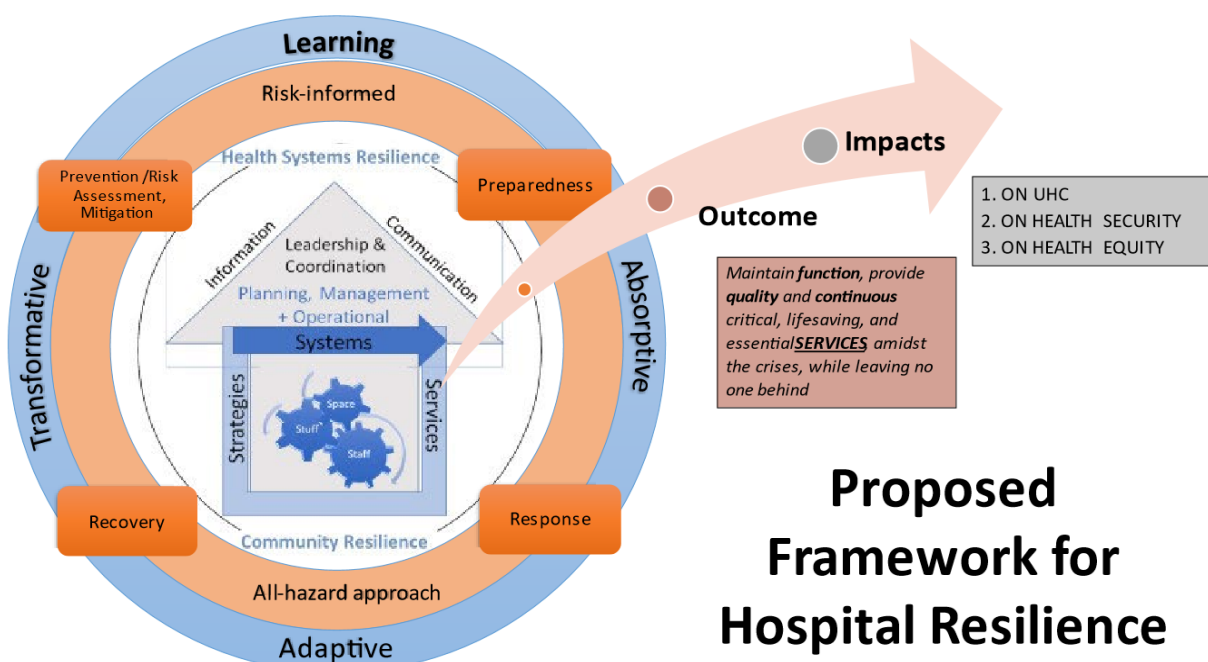
Conceptualization of hospital resilience

The proposed conceptual framework synthesizes existing evidence and highlights the starting point for discussion on strengthening hospital resilience (Figure 1). It defines hospital resilience using 6 components (6S), 4 capacities, and outcomes and impacts.

Strengthening hospital resilience requires hard and soft resilience, defined by 6 interdependent components: **space, staff, stuff, strategies, systems, and services** (3). Resilient hospitals must **absorb, adapt, transform, and learn**, using all these capacities, sometimes simultaneously, through prevention, preparedness, response, and recovery, within a risk-informed and all-hazard approach (3).

The primary outcome of resilient hospitals is the maintenance of hospital functions as they provide high-quality and continuous critical and essential services amidst crises, while leaving no one behind. Resilient hospitals help improve access and coverage, reduce

Figure 1 Proposed conceptual framework for hospital resilience



¹ Summary report on the Expert consultation on hospital resilience in the Eastern Mediterranean Region. <https://applications.emro.who.int/docs/WHOEMHCM133E-eng.pdf>.

vulnerabilities, and challenge inequalities, further contributing to the advancement of Universal Health Coverage, global health security, and health equity. Strengthening hospital resilience is embedded in and contributes to improving health systems and community resilience (Figure 1).

Participants found the framework to be comprehensive in capturing divergent concepts in the literature and recommended that it should be linked to a simple and practical operational guide to enable its application at the facility level. They suggested the linkage of components and capacities to interventions, monitoring and evaluation, and mechanisms to streamline and sustain continuous improvements, learning and innovation, and to reflect linkage to climate resilience and environmental sustainability.

Operationalization of hospital resilience

Operationalizing resilience is one of the greatest challenges in strengthening hospital resilience because of its newness and divergent concepts. There is limited contextualized and practical guidance for hospitals and hospital managers and a lack of integration of health system nuances and the dynamic nature of resilience into operationalization (3).

Participants highlighted the importance of embedding hospital resilience in the broader health systems strengthening initiatives and national incident management systems, and contextualising guidance on operationalization to accommodate the challenges of resource-restrained, fragile and conflict-affected settings. They proposed the development of an operational matrix to guide hospital managers before, during and after an emergency.

Participants noted the gaps and interventions on strengthening hospital resilience during the prevention, preparedness, response, and recovery stages (4). For example, they proposed risk assessment strategies to inform planning for service continuity and highlighted the need to update, re-align and strengthen facility and national preparedness and response plans based on prioritized risk profiles and hazard types. Participants

proposed rapid health facility assessment to evaluate the safety of the hospital, available beds, staff, and resources and enable planning for an immediate and agile response and recovery. They highlighted the critical need for data, guidance for scale-down of response during recovery, and planning for mental health and psychosocial support of staff. They noted the need to compile an inventory of tools, document and share experiences, ensure sustainable and continuous improvements, and develop the capacities of hospital managers and their teams.

Evaluation of hospital resilience

A paucity of measurable and validated indices, lack of validated and standardized measurement tools, and limited linkages between theoretical frameworks and evaluation models remain challenges to evaluating hospital resilience (3). Participants agreed that hospital performance could be the primary indicator of resilience, while access, quality, cost-effectiveness, etc. could be intermediate measures (3-5).

Based on the conceptual framework, a guidance document with relevant tools has been developed, including interventions for each component across the prevention, preparedness, response, and recovery stages.

Conclusions

Participants in the expert panel encouraged EMR Member States to demonstrate political commitment and allocate resources to integrate hospital resilience within health systems and relevant national health security strategies. It is also advisable to pilot the hospital resilience operational guidance in collaboration with WHO/EMRO and evaluate the outcomes. WHO is encouraged to provide technical and capacity building support for piloting and implementation of the hospital resilience operational guidance. Developing a list of key indicators for qualitative and quantitative assessment of hospital resilience agenda at national level will also be beneficial. WHO and the countries should enhance efforts in conducting related operational research and documenting the outcomes for further use by the Member States.

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