بسم الله الرحمن الرحيم

HEALTH SYSTEM RECOVERY & RESILIENCE

تاب آوری و بازتوانی سیستم سلامت در مخاطره زلزله

روح انگیز نوروزی نیا دکتری تخصصی سلامت در فوریتها و بلایا استادیار دانشگاه علوم یزشکی البرز

Norouzinia.r@gmail.com

Health systems recovery is defined as the rebuilding, restoration and improvement of the health system's components and core public health functions, in alignment with the principles of building back better and sustainable development.

The **ultimate goal** of health systems recovery is to design a system that is able to:

- **respond to the demands and health needs of the population;**
- perform its functions effectively, efficiently, and sustainably;
- □ increase health systems resilience;
- **and mitigate the risk of future health emergencies.**

This goal is achieved through action on the six health systems building blocks –

- □ service delivery,
- □ health workforce,
- □ health information systems,
- □ access to essential medicines,
- □ financing
- □ and leadership/ governance.

Action is also required on the four core public health functions –

- **u** surveillance and monitoring of health determinants, risks, morbidity and mortality;
- preparedness and public health response to disease outbreaks, natural disasters and other emergencies;
- □ health protection including management of environmental, food, toxicological and occupational safety;
- □ health promotion and disease prevention through population and personalized interventions, including action to address social determinants and health inequity



Disasters >>> PDNA >>> DRF | Conflicts >>> RPBA >>> RRF

ARP = advance recovery preparedness; DRF = disaster recovery framework; PDNA = post-disaster needs assessment; RPBA = recovery and peace building assessment; RRF = recovery and resilience framework

Fig. 2. Schematic view of the health systems recovery process

STEPS OF THE RECOVERY CYCLE

- □ (1) Advance recovery preparedness (ARP)
 - **Establishing a coordination mechanism.**
 - **Building institutional capacity.**
 - □ Information management and communication.

- (2) Health system recovery assessment
- □ (3) Health systems recovery planning
- □ (4) Resource mobilization
- □ (5) Implementation of the recovery strategy
- **(6)** Monitoring and evaluation

HEALTH SYSTEMS RECOVERY PHASES

Healthsystemsrecoveryhasbeendividedinto twodistinct andidentifiablephases:

Early recovery and transition (ERT);

□ And Long-term recovery (LTR).



Fig. 1. Criteria to assess the phase of recovery and differentiate between response and recovery interventions

EARLY RECOVERY AND TRANSITION (ERT)

Once the acute phase of an emergency is over, recovery begins and a shift occurs as response activities and programming are gradually replaced by their recovery equivalents.

□ ERT encompasses the stabilization period, the transition between response and recovery, and early to mid-term recovery.

□ Depending on the extent of damage, context, level of emergency preparedness and the type of emergency, ERT takes on average 1–3 years for non-conflict related-emergencies and 3–5 years for conflicts; however, in complex or protracted emergencies it may last for the duration of the crisis.

LONG-TERM RECOVERY (LTR)

□ The second and final phase of recovery occurs over a longer period of time and generally demands long-term investments in the health sector.

□ The goal of this phase is to build the health system back better and smarter, by improving its resilience and sustainability and establishing models of care that consider and are adapted to future health needs.

□ Recovery can be a window of opportunity to rebuild the health system in a way that ensures it is better than the pre-emergency version.

□ This is the core of the "build back better" principle, an approach to emergency recovery that aims to reduce vulnerability to future disasters and build community resilience by addressing physical, social, environmental, climate and economic vulnerabilities and shocks.

- □ Taking the building back better approach to health systems recovery ensures that the rebuilt system is stronger, safer, smarter and more resilient.
- □ This necessitates the identification and rectification of weaknesses inherent to the previous system.
- During health systems recovery, health service provision can be improved, for instance, by addressing previously neglected areas such as mental health and noncommunicable diseases, strengthening linkages between primary and secondary health services, reviewing the distribution of facilities against demographic changes and constructing new facilities in areas with the greatest need.

- □ The resilience of the new health system can be improved by introducing disaster risk reduction measures such as building codes and land use planning regulations.
- **Damaged facilities can be modernized or rightsized,**
- □ and assets can be replaced with technologically up to-date, environmentally sensitive and climate-friendly alternatives (for example, by applying green hospital technologies for renewable energy and water use reduction).

□ To ensure that all partners work together and the opportunity to build back better is not missed, recovery should ideally begin with a planning stage and analysis to identify opportunities, vulnerabilities, risks and key health system barriers including bottlenecks to service delivery.

GUIDING PRINCIPLES FOR HEALTH SYSTEMS RECOVERY

□ First do no harm. Consider the long-term impact of interventions but prioritize immediate life-saving activities. Ensure they are implemented in a way that is neither detrimental to the population or environment, nor contributes to future vulnerabilities in the health system.

□ **Respect humanitarian principles.** Ensure that recovery activities are guided by humanity, neutrality, impartiality and independence.

GUIDING PRINCIPLES FOR HEALTH SYSTEMS RECOVERY

□ Apply effective development cooperation principles. Ensure that recovery is aligned to national priorities, tailored to the country's specific situation and needs, inclusive and results-focused, and country-led. It should however be noted that this may be difficult to operationalize in contexts where different factions are in conflict. Humanitarian aid should only be used when absolutely necessary.

□ Integrate recovery approaches from the beginning. Initiate recovery activities at the earliest phases of response operations, laying the ground for long-term recovery and the rebuilding of local capacity where necessary.

GUIDING PRINCIPLES FOR HEALTH SYSTEMS RECOVERY

□ Ensure context-specificity. Ensure thorough understanding of the context before launching interventions. Each situation is unique, therefore recovery planning and implementation should be tailored and adapted accordingly.

□ Ensure community participation and engagement. Work with and ensure accountability to the local community. Populations under stress often have good information and insight into their needs, thus collaborating with them may lead to identifying and implementing context appropriate health system interventions that contribute to social cohesion and result in a more effective and sustainable recovery.

ROLES AND RESPONSIBILITIES OF DIFFERENT ACTORS AND STAKEHOLDERS

□ Every emergency brings together a wide variety of actors who respond to the emergency and provide support in the recovery process.

□ Coordination can be a challenge in these situations, unless the roles and responsibilities of the various actors are clearly identified and defined.

• Assessment of health workforce capacity and identification of shortages in all areas, to ensure that outbreak response plans can be implemented.

 Creation of surge capacity, including through the activation of the dormant workforce, accelerated training, redeployment or task-shifting.

• Short- and long-term workforce planning that includes an assessment of the current and future needs of the population, identification of the health services required, innovative ways to deliver those services and, consequently, the type of health workers needed and how to deploy them.

 Workforce planning should be closely linked to service delivery priorities, plans and strategies.

□ • Development of strategy to curtail and reverse brain drain.

 Accelerated skill development for existing health workforce on the priority health needs and programs of the response operations through non-traditional methods such as the production of guidelines, self-learning options or supervision.

• Training of new health workforce as needed, ensuring consistency with national standards to facilitate accreditation and eventual integration into the national health system.

• Addressing of health worker shortages through retraining of cadres developed during the emergency, pre-service training, creation of new cadres, task shifting, and activation of the dormant workforce such as retirees.

 Capacity-building for lifesaving activities with longer term benefits, such as infection prevention and control measures.

• Harmonization of salary scale and incentive packages offered by different organizations with national standards.

• Support for regular payment of staff salaries that have been interrupted by emergency.

• Establishment of health workforce information system to support evidence-based planning and forecasting of workforce requirements

 Addressing of other health workforce challenges such as accommodation, transportation and security.

 Implementation of equal opportunities policies to avoid excluding potential or actual health workers for reasons such as gender or ethnicity.

• Provision of psychosocial support to staff and their family who have been traumatized by emergency.

- The word 'resilience' origins from the Latin prefix 're-' (back) and the verb 'salire' (to jump, leap). In science, it has long been used by engineering and material science to describe the ability of a material to absorb energy without losing its original form or characteristics.
- Over time, different disciplines adopted and adapted the term, adding different interpretations and facets to it: In ecology, In psychology, resilience is understood as the individual human capability to cope with crises, losses or hardships without negative consequences.
- In the last decade, the concept of resilience has also gained popularity in global public health. This development is reflected by major UN frameworks adopted in the last decade the 2015–30 Sendai Framework for Disaster Risk Reduction (UNISDR, 2015), increases the focus on health in the disaster preparedness discourse and correspondingly calls for health resilience.

- In a 2016 editorial of Bulletin of the World Health Organization (WHO), health system resilience is named as a critical concept for global health, in the same vein as health system strengthening, universal health coverage and health security.
- While definitions and concepts of health systems resilience differ substantially throughout the literature, all have a common core:
 - they regard resilience as the degree of change a system can undergo while maintaining its functionality.

- □ Health system resilience is the ability to prepare for, manage (absorb, adapt and transform) and learn from shocks.
- Shock is a sudden and extreme change which impacts on a health system, and is thus different

from the predictable and enduring health system stresses, such as population ageing.

❑ A shock cycle has four stages: Stage 1: Preparedness; Stage 2: Shock onset and alert; Stage 3: Shock impact and management; and Stage 4: Recovery and learning.



Three levels of resilience:

- Absorptive capacity—'capacity of a health system to continue to deliver the same level (quantity, quality and equity) of basic healthcare services and protection to populations despite the shock using the same level of resources and capacities'
- Adaptive capacity—'capacity of the health system actors to deliver the same level of healthcare services with fewer and/ or different resources, which requires making organisational adaptations'
- Transformative capacity—'the ability of health system actors to transform the functions and structure of the health system to respond to a changing environment'

- In the disaster management sciences, resilience discussions were initially focused on the maintenance of infrastructure, functionality of health care facilities and continued service delivery. operationalizing resilience as 'capability of a health system to mitigate the impact of major external disruptions on its ability to meet the needs of the population during the disaster'.
- This approach, developed as a critique to traditional views of healthcare safety as an 'absence of failures', defines safety as the 'ability to succeed under varying conditions'.

WHAT STRATEGIES MAKE HEALTH SYSTEMS MORE RESILIENT?

- Health systems are complex. Shocks thus create complex and sometimes unforeseen consequences on health systems.
- A whole system approach is therefore needed to understand the ramifications of the shock in relation to the functioning of health systems and adopt the appropriate response.

WHAT STRATEGIES MAKE HEALTH SYSTEMS MORE RESILIENT?

- (1) Effective and participatory leadership with strong vision and communication
- (2) Coordination of activities across government and key stakeholders
- (3) Organizational learning culture that is responsive to crises
- (4) Effective information systems and flows
- (5) Surveillance enabling timely detection of shocks and their impact
- (6) Ensuring sufficient monetary resources in the system and flexibility to reallocate and inject extra funds

WHAT STRATEGIES MAKE HEALTH SYSTEMS MORE RESILIENT?

- (7) Ensuring stability of health system funding through countercyclical health financing mechanisms and reserves
- (8) Purchasing flexibility and reallocation of funding to meet changing needs
- (9) Comprehensive health coverage
- (10) Appropriate level and distribution of human and physical resources
- (11) Ability to increase capacity to cope with a sudden surge in demand
- (12) Motivated and well-supported workforce
- (13) Alternative and flexible approaches to deliver care



REFERENCES

- World Health Organization 2020 (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies). Strengthening health systems resilience :Key concepts and strategies.
- Disaster Recovery Guidance Series Health Sector Recovery. For more information on implementing recovery programs, please visit the GFDRR Recovery Hub: https://www.gfdrr.org/recovery-hub.

