

# Building resilient health professions education in fragile contexts



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Your expectations from today's workshop?



# Learning objectives

After this presentation, we will be able to:

1. Describe fragility in HPE
2. List situations and weaknesses leading to fragility in HPE
3. Differentiate negative outcomes of fragility
4. Describe requirements to overcome the ongoing challenges faced by HPE in fragile settings

# Building resilient health professions education in fragile contexts: AMEE guide No. 182



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## Building resilient health professions education in fragile contexts: AMEE guide No. 182

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# Let us know



- 1) What are the first words that come to your mind when it comes to the management of educational fragility?
- 2) What is the first thing we should do in a situation of educational fragility?
- 3) Do we need to change curricula in time of an educational fragility?
- 4) What can we do to maintain the continuity of education in cases where students cannot be trained on campus and do not have access to the internet?

# Description of fragility in HPE

“Chronic limitation or threat to the capacity to deliver consistent, safe, and comprehensive medical and health professions training”.



# Situations and weaknesses leading to fragility in HPE

Disasters

Persistent conflict

Socio-economic collapse

Political instability

Resource scarcity

Debilitated public health infrastructure

# Negative outcomes of fragility

Institutional/ system breakdown

Fragmentation of system

Resource shortages

Threatening learner and faculty safety

Displacement

Humanitarian crises

Workforce instability

Violence

Disruption of training continuity

Limitation of the ability of educators and policymakers to plan targeted responses



# The impacts of fragile contexts on health professions education

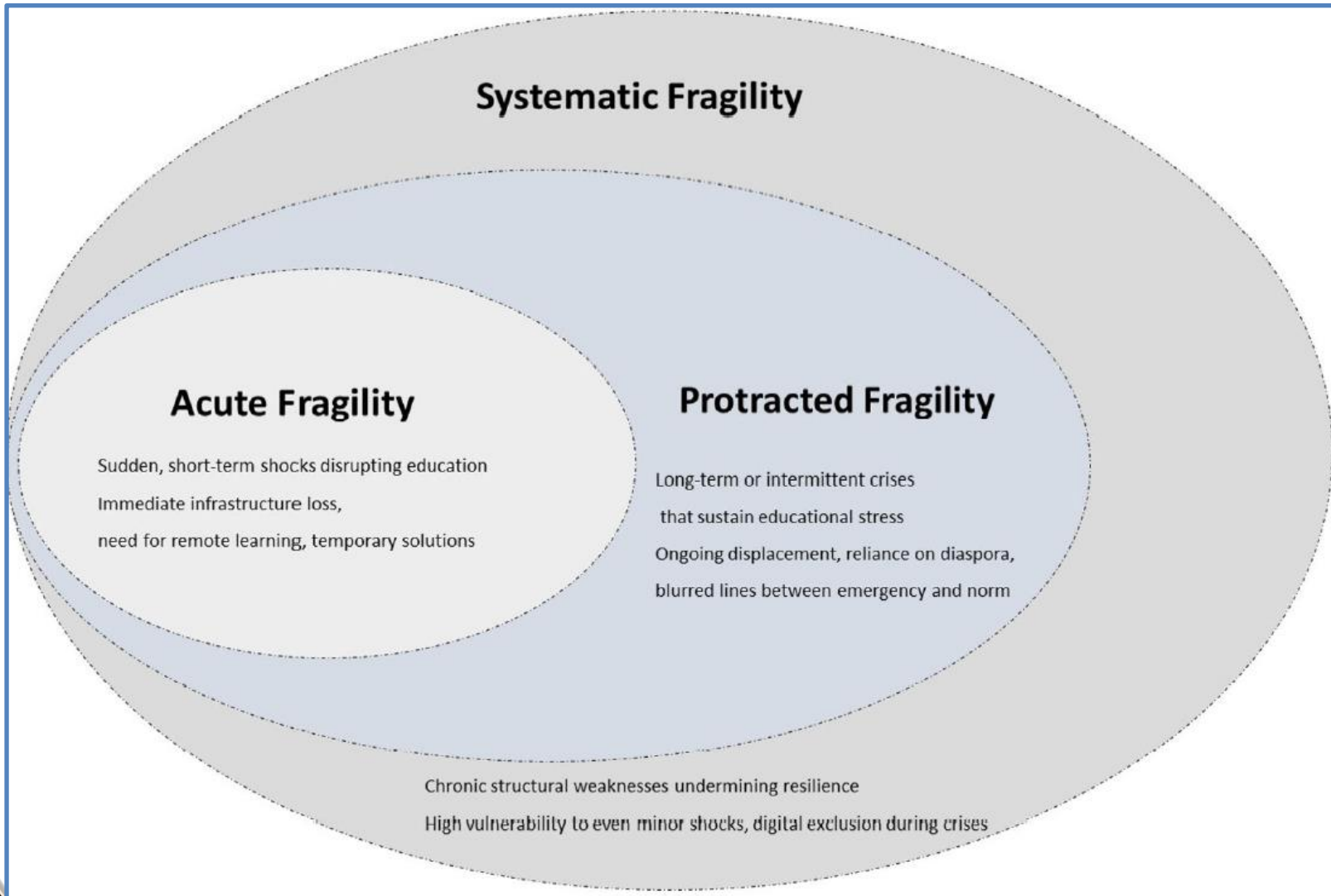
Competency and graduation delays

Psychological toll and erosion of the community

Threats to well-being and professional identity

Campus closures and displacement leading to weak peer support and diminished engagement with healthcare communities, undermining social accountability.

# Typologies of fragility in health professions education



# Systemic fragility

Deep-seated structural and cultural issues

Underfunding, inadequate infrastructure, poor governance, outdated curricula, and a lack of institutional readiness

Widespread failure even after minor external shocks/ remaining even during stable periods

Teaching activities halt during a pandemic in some underdeveloped countries, medical schools without reliable electricity or internet

Remote learning, sustained investment in institutional capacity, faculty growth, and infrastructure improvements

Your summary up to now?



# Dimensions of disruptive manifestations of fragility and their consequences

Damage to infrastructure



Displacement of learners and educators



Collapse of regulatory systems



Interruption of teaching and clinical training



Direct threat to the development of the health workforce



Threat to population health

# Requirements to overcome the ongoing challenges faced by HPE in fragile settings

1

- A shift in approach – from reactive methods to proactive

2

- Systems-based strategies that incorporate **flexibility**, **inclusivity**, and **resilience** as core features of educational institutions

# Critical roles of socially accountable institutions in time of fragility

## Protecting access to care

Running free clinics or disease surveillance programs in hard-hit areas

Coordinating internally and externally

Lobbying governments and international organizations to protect access to healthcare

Sustaining the local health workforce

Aligning and mobilizing resources, policies, and partnerships with the urgent health needs created by conflict

Advocating for medical neutrality and human rights

# Response and outcome variables in systems thinking approach

## Response variables

- 1) Institutional adaptations
- 2) Technology adoption
- 3) Partnership formation
- 4) Curriculum flexibility
- 5) Capacity building
- 6) Community integration
- 7) Financial innovation

## Outcome variables

- 1) Educational continuity
- 2) Institutional resilience
- 3) Graduate competency
- 4) Community health impact

# Response to fragile context in HPE according to systems-thinking approach

Recognizing fragility as a **predictable situation** rather than an exception

Designing crisis preparedness through emergency curricula

Inter-institutional agreements for student relocation

Cloud backups of learning materials



Creating redundancies, such as enabling faculty to teach via multiple modalities, maintaining both high and low-tech teaching tools, and diversifying clinical placements

# Responses to crisis at the institutional level

- Establishing a dedicated Crisis Management Committee (CMC)
- Developing structured crisis management programs parallel to university crisis programs and the WHO **toolkit** for health-system emergency preparedness
- Tracking performance via KPIs(Key performance indicators)

# CMC ToR in fragile HPE settings

## **Box 2.** Crisis Management Committee ToR in fragile HPE settings.

### Rationale

- Resilience requires adaptive governance, multi-stakeholder coordination

### Role

- Maintain educational and clinical missions
- Protect learners, faculty, and patients

### Core duties

- Plan multi-scenario crisis response with activation triggers
- Coordinate internally and externally under crises
- Mobilize and reassign resources as needed
- Document activity and monitor using concrete metrics
- Debrief post-crisis and review plans annually

### Structure

- Dean-led committee with academics, student-support, safety, IT, communications, and external representation

### Authority

- Adjust calendars, teaching formats, and personnel deployment
- Direct reporting to academic leadership

### Process

- Activate within 24 hrs; weekly meetings in crisis; monthly otherwise
- Maintain minutes, action logs, and crisis dashboards

### Monitoring

- KPIs (Key performance indicators): response time, communications, attendance, qualitative feedback
- Annual reviews guided by international frameworks, including WHO

# KPIs(Key performance indicators)

Response time

Communication frequency

Student engagement

Qualitative feedback

Annual reviews

# Important actions in time of fragility

Holding dean-led CMCs with academics, student-support, safety, IT, communications, and external representation

Activating within 24 hrs; weekly meetings in crisis; monthly otherwise

Distilling practical strategies for curricular adaptation, alternative delivery methods, crisis-responsive assessment, learner and faculty support, quality assurance, and community partnerships

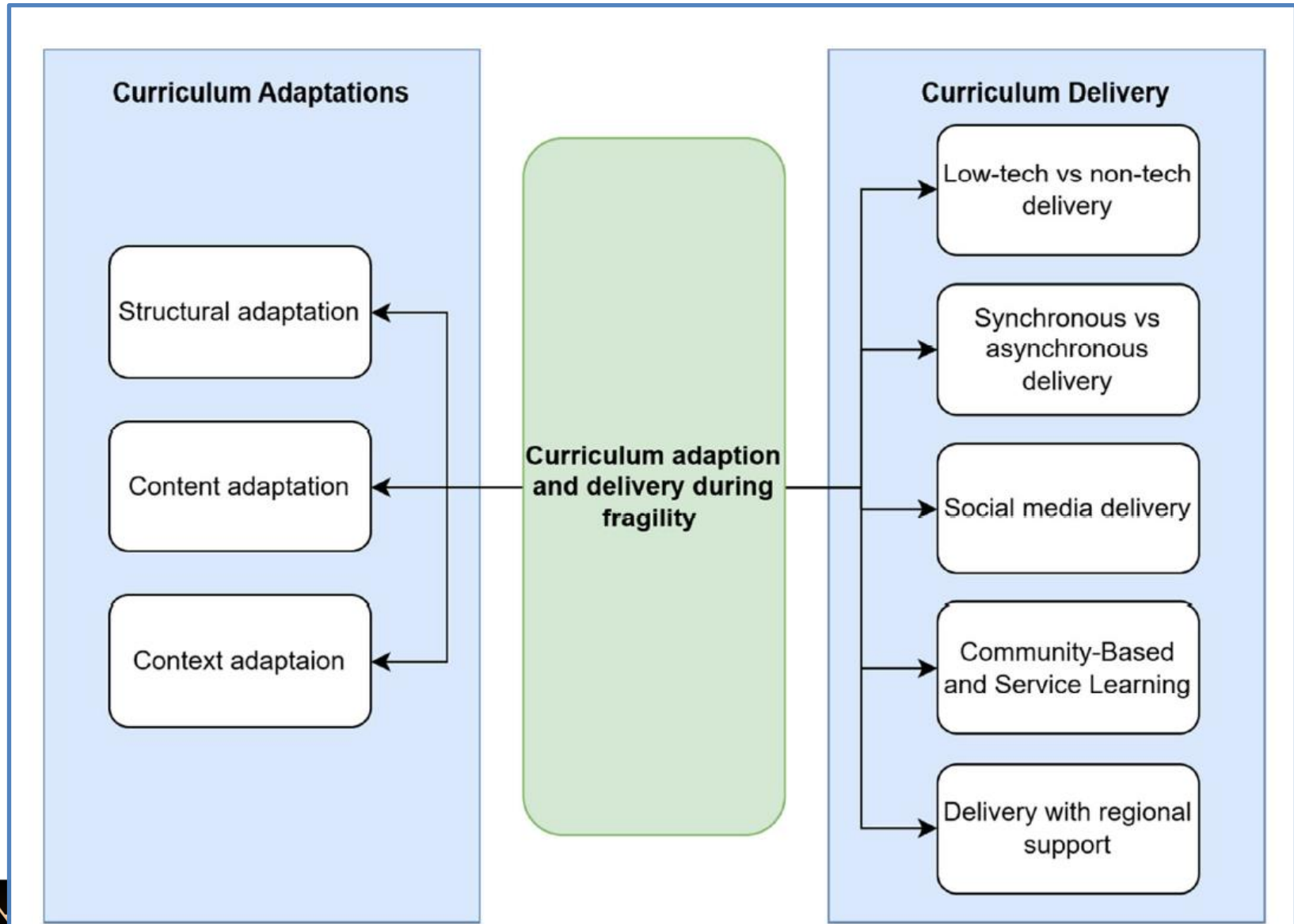
Upholding educational quality, equity, and relevance during crisis conditions

Debriefing post-crisis and review plans annually

# Lessons learned from the systems thinking approach at a glance?



# Curriculum adaptation and delivery at fragile contexts



# Curriculum adaptation and delivery during fragile contexts

☀️ “In fragile and conflict-affected settings, medical curricula must be flexible and responsive to the context to ensure the continuity of training”.

## Key adaptations of the curriculum during fragility

- 1) Modular and competency-based structures that enable students to pause and resume their studies as conditions allow
- 2) The inclusion of content-specific topics and context-specific modules or courses

# Curricula structural adaptation

Essential when students may be displaced or face intermittent access to instruction

Allowing learners to progress based on demonstrated competencies rather than rigid timelines (non-linear educational pathways)

Supporting adaptive progression by Competency-Based Medical Education (CBME), especially when traditional assessments or clinical placements are disrupted

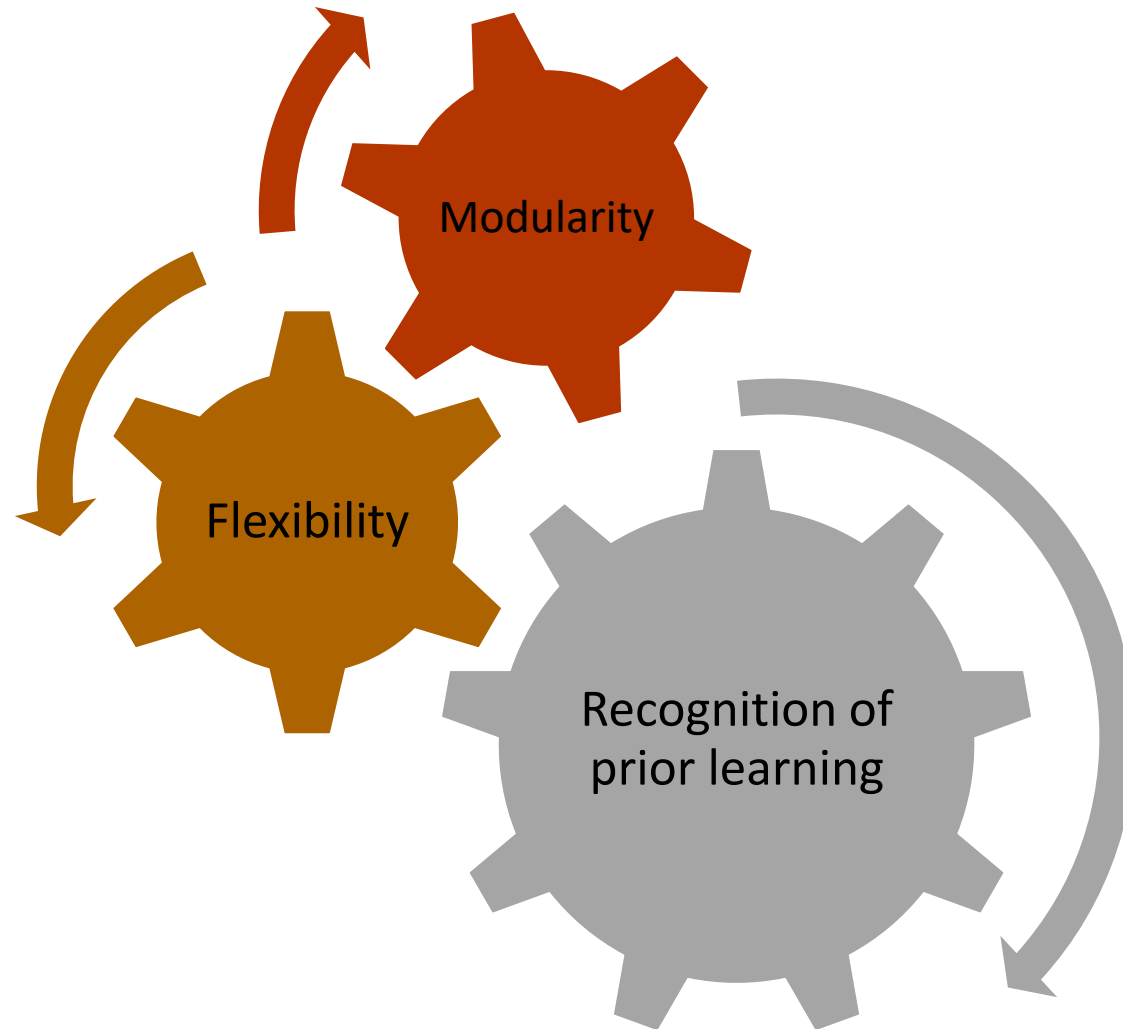
# Curricula structural adaptation

Using supervised community-based service, as a critical substitute for hospital rotations

Easy recalibration of schedules or compression of modules without compromising learning outcomes by adopting modular design

To provide flexibility and resilience needed in fragile and conflict-affected settings

# Efficient and ethically essential adaptations in fragile contexts



# An example of curricula structural adaptation

“During the Ukrainian crisis, many health professions education institutions adopted modular curricula and negotiated credit-transfer agreements, allowing students to resume their education in neighboring countries without repeating prior learning”.



# Curricula content adaptations

Prioritization of lifesaving skills – emergency care, infection control, and mental health first aid and postponing less urgent content

Adaptations aligned with core social accountability principles by focusing learning on population and system needs during emergencies

Repurposing research methods modules or integrating public health surveillance into the curriculum

- ❑ During the 2014–2016 **Ebola outbreak** in West Africa, several medical schools pivoted quickly to provide condensed modules on infection control through remote or small-group sessions, using WHO and MSF materials
- ❑ **COVID-19** forced global institutions to defer elective rotations and shift toward virtual delivery of urgent clinical content, such as triage protocols and respiratory care

# Curricula context-relevant modules

“Traditional medical curricula fail to prepare students for managing blast trauma, chemical injuries, and psychological trauma under austere conditions.



Proposing for a structured module includes the epidemiology of war injuries, wound ballistics, mass-casualty triage, ethical issues in conflict zones, and basic surgical skills.

Planning courses in Disaster Medicine, Conflict Health, or Community Engagement in Crisis, equip future professionals with knowledge and skills to respond to immediate population needs.

Inclusion of conflict medicine in undergraduate and postgraduate curricula in regions affected by chronic or recurrent conflicts

# Curricula context-relevant modules

Embedding real-world clinical experience through community hospital placements, treating war casualties, supporting the development of procedural and decision-making competencies.

A shift from 'curriculum importation' to 'curriculum indigenization', ensuring alignment with the social accountability agenda.

Integrating modules that reflect the lived realities of learners in fragile settings to enhance both educational relevance and learner motivation.

Not merely reactive context-relevant modules, but also supporting long-term system transformation by anchoring medical education in local realities.

# Curricula context-relevant modules

Assistance of NGOs and regional partners in content development, training, and evaluation of these targeted learning packages where institutional capacity is limited.

In Liberia, following the Ebola crisis, medical education reform included targeted training in outbreak preparedness and health system resilience.

Similarly, during Syria's war, NGOs and universities collaborated to offer crash courses in emergency surgical care, infectious disease control, and trauma management.

At the Lebanese University in partnership with the ICRC through a 33-topic weekend course combining theoretical, operational, and practical learning.

# Low-tech and no-tech modalities

Often prioritized due to their inherent reliability and broad accessibility

Leveraging online classroom technology and mentorship with low-bandwidth internet to facilitate remote distance-learning collaborations.

Entirely independent of digital infrastructure, making them crucial in the most resource-limited settings.

Promoting equitable access to education for students in challenging environments

# Low-tech and no-tech modalities

CD-ROMs or USB sticks, providing presentations, videos, and educational software programs.

Medical education podcasts

Radio and television broadcasting

The OxPal Medlink initiative

“Research even suggests that offline computer-based e-learning can be as effective as traditional methods for knowledge acquisition, and potentially better for skill development.”



# Synchronous and asynchronous curricula delivery

Shift to online education as a vital strategy for maintaining educational continuity during times of conflict and disaster

The influence of critical infrastructural factors, notably internet access and technological accessibility on the selection between synchronous and asynchronous delivery modalities

Adoption of hybrid instructional methods (both synchronous and asynchronous elements) after the conflicts in Sudan and Ukraine, and the Kahramanmara earthquake in Turkey

Sustaining the healthcare educational process at the University of Parma in Myanmar following the instability resulting from the 2021 military coup by an asynchronous e-learning program

A Pediatric Advanced Life Support (PALS) course in Iraq via interactive teleconference, allowing real-time interaction between instructors in Florida and participants in Baghdad

# Social media as learning platforms

like YouTube, Facebook, X (formerly Twitter), WhatsApp, Telegram and WeChat

Feasible and low-cost : as valuable educational modalities, particularly in fragile context

Using telegram in Sudan, for distributing educational materials to undergraduate students

Providing rapid education in emergency medicine and trauma care to healthcare workers the Sudan Emergency ECHO program through a platform

Viber facilitated information exchange among medical students at Dnipro State Medical University in Ukraine

# Social media as learning platforms

PAL as a cost-effective and highly effective alternative to traditional methods in challenging environments

Peer-assisted learning (PAL) as a vital and adaptable educational strategy in fragile settings, by leveraging existing student capabilities and fostering increased student ownership of their education

An online, peer-taught Evidence-Based Medicine course at Damascus University, and peer-led Basic Life Support training at Syrian Private University

The Aqoon program, which facilitates peer-to-peer e-learning between medical students at King's College London in the UK and students at Hargeisa and Amoud Universities in Somaliland

# Community-based education and service learning

Crucial for preparing students to address real-world health needs, developing practical skills, and making a tangible community impact

“in 1999, following Hurricane Floyd’s devastation in eastern North Carolina: medical students provided aid to affected communities and did various tasks, like cleaning damaged homes, distributing essentials, and caring for stranded animals, all while meeting their learning outcomes”.

“Damascus University’s ‘Syrian Smiles’ program offered dental undergraduates’ outreach in Dental Public Health (DPH) to is involved delivering preventive care to disadvantaged children, educating their social networks, and advocating for health promotion policies. Similarly, in Ukraine, surgery residents volunteered as frontline surgeons”.

# Regional and diaspora teaching support

For sustaining education in time of disrupted local systems

For scalable and sustainable external academic support in fragile contexts

For providing continuity and helping to bridge capacity gaps in staffing and infrastructure

"Syrian, Sudanese, and Turkish academic communities have organized coordinated online lecture series aligned with national curricula, often supported by NGOs and global academic partners."

# Your summary of the entire session?



# Take home message

“Education not only as a system to be preserved, but as an instrument for health system recovery and societal healing through the application of social accountability principles and values in curriculum delivery, educational research and community services.”

"Resilience should be viewed not just as an emergency response but as a fundamental design principle for 21st century HPE."



Coordination with health systems, telecommunications, government, and communities to integrate students effectively into emergency responses

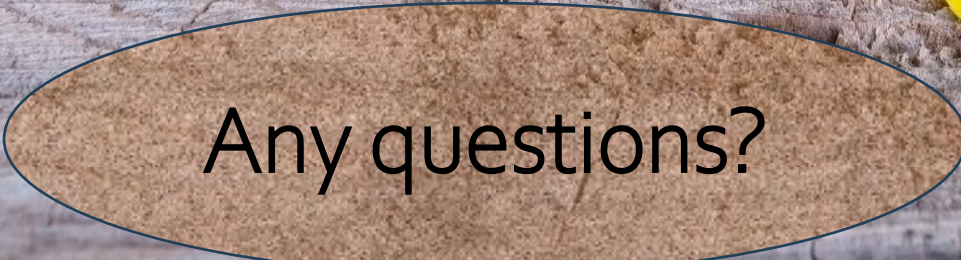
# References



- 1) Mohamed Hassan Taha, Majed Wadi, Abdelrahim Mutwakel Gaffar, Esra Abdallah Abdalwahed Mahgoub, Ghaith Alfakhry, David Taylor & Mohamed Elhassan Abdalla (10 Jan 2026): Building resilient health professions education in fragile contexts: AMEE guide No. 182, Medical Teacher, DOI: 10.1080/0142159X.2025.2606070
- 2) Google images

A photograph of a small, rectangular, light-brown cardboard tag with a hole on the left side. A black string is threaded through the hole and forms a loop. The tag is placed on a rustic, weathered wooden surface. Two bright yellow daffodils are positioned around the tag: one is in the upper left, slightly out of focus, and the other is in the lower right, in sharp focus. The text 'Thank you!' is written in a black, cursive font on the tag.

Thank  
you!

An oval-shaped, light-brown cardboard tag with a thin blue border. The text 'Any questions?' is written in a black, sans-serif font in the center of the tag.

Any questions?