



The Role of Rehabilitation in Conflict and Disaster

Rehabilitation
2030

Pete Skelton, WHO Rehabilitation in Emergencies Focal Point



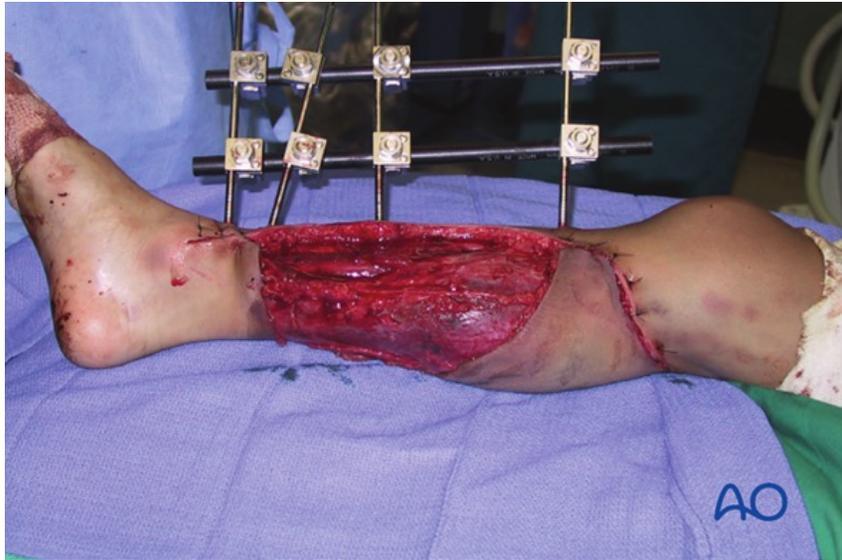
Rehabilitation in Emergencies?





Rehabilitation is...
“A set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments” (WHO)

Or, simply put,
Rehabilitation:
Prevents Complications and
Optimises Recovery



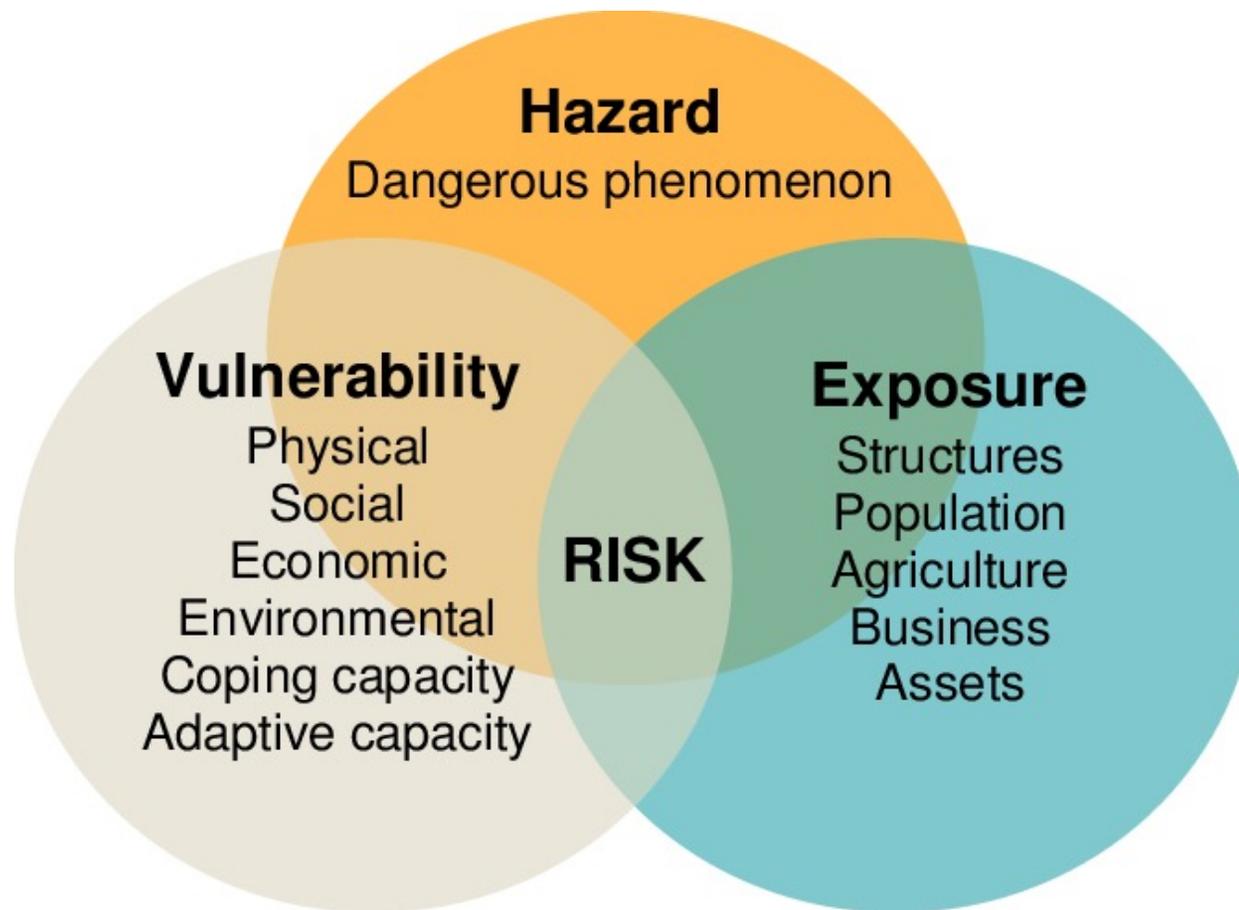


And a health emergency is...

*“A type of event or imminent threat that produces or has the potential to produce a range of health consequences, and which requires **coordinated action**, usually urgent and often non-routine.”*

NATURAL				HUMAN INDUCED		ENVIRONMENTAL
Geophysical	Hydro or Meteorological	Biological (outbreak)	Extra-terrestrial	technological	societal	Environmental degradation
Earthquake	Storm	Airborne	Impact (meteorite)	Chemical spill	Conflict	Sea level rises
Tsunami	Flood	Waterborne	Space weather	Radiation	Civil unrest	Salinisation
Volcano	Landslide	Vector borne		Explosion	Terrorism	Desertification
	Avalanche	(also infestations, anti-biotic resistance and others)		Contamination	Stampede	
	Extreme Temperature			Transport	financial	
	Wildfire			cybersecurity		

Hazard does not = Emergency or Disaster!





Earthquakes: Armenia ranked 7th in EURO region for earthquake risk
Armenia/Spitak 1988: 130,000 injured (Melkonian et al)
Haiti 2010: 300,000 injured
Nepal 2015: 22,000 injured
Ecuador 2016: 16,000 injured
Turkey 2020: 1000 injured



Conflicts

Armenia: 11,000 (MoD)

Syria: 1.5 million injured 2011-2017 (WHO)

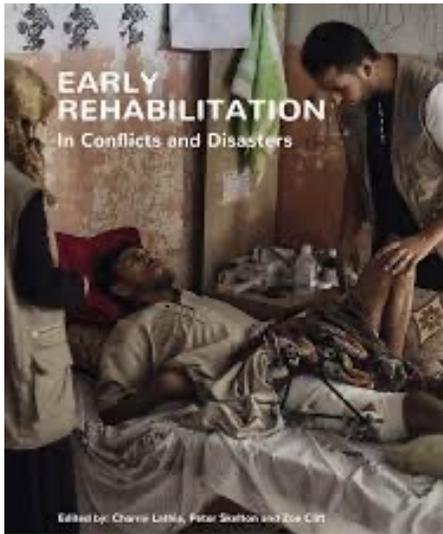
Yemen: 44,000 injured 2015-2017 (WHO)

Gaza Crisis: 12,831 in 2014 (OCHA)

An aerial photograph showing the aftermath of a major industrial disaster. The foreground is dominated by a vast field of twisted metal debris, likely from a collapsed structure. In the middle ground, a large, cylindrical industrial tank stands amidst the wreckage. The background features a body of water with several ships and cranes, suggesting a port or industrial zone. The sky is overcast, and the overall scene conveys a sense of scale and devastation.

Terrorism, Explosions, Transport etc:
2020 Beirut Blast Over 6000 injured
2017 Manchester Bombing: Over 800 injured
2015 Taiwan Water Park Fire: over 500 surviving burn injuries
2015 Romania Night Club Fire: 150 surviving burn injuries
2015 South Sudan Tanker Explosion: Over 100 surviving burn injuries





MINIMUM TECHNICAL STANDARDS AND RECOMMENDATIONS FOR REHABILITATION

Emergency Medical Teams



Guidance Note on Disability and Emergency Risk Management for Health



Responding internationally to disasters



A do's and don'ts guide for rehabilitation professionals

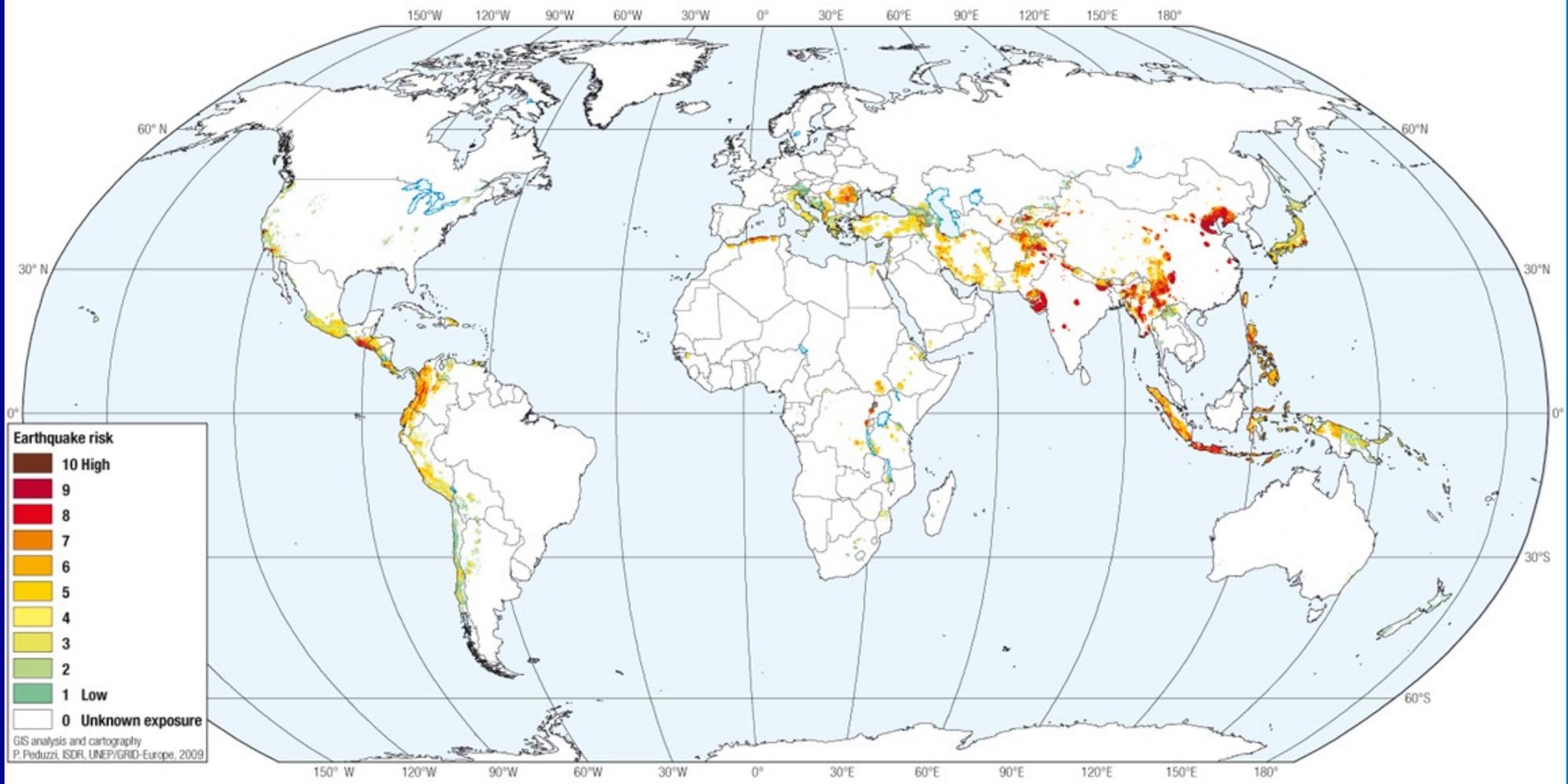




Challenge 1:

Rehabilitation is under-resourced in almost all emergency settings

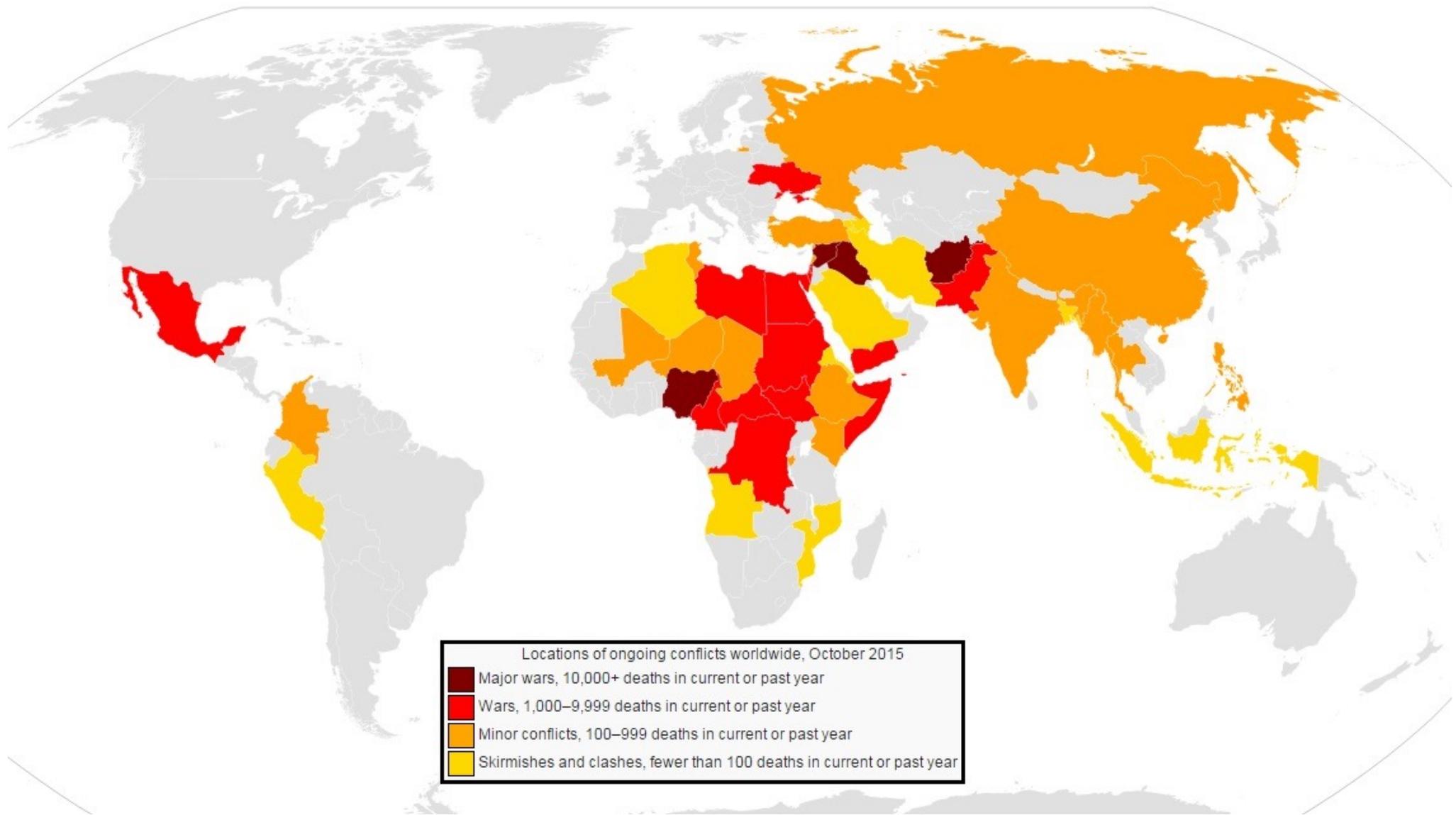
Distribution of mortality risk associated with earthquakes (10 × 10 km)



Earthquake risk

- 10 High
- 9
- 8
- 7
- 6
- 5
- 4
- 3
- 2
- 1 Low
- 0 Unknown exposure

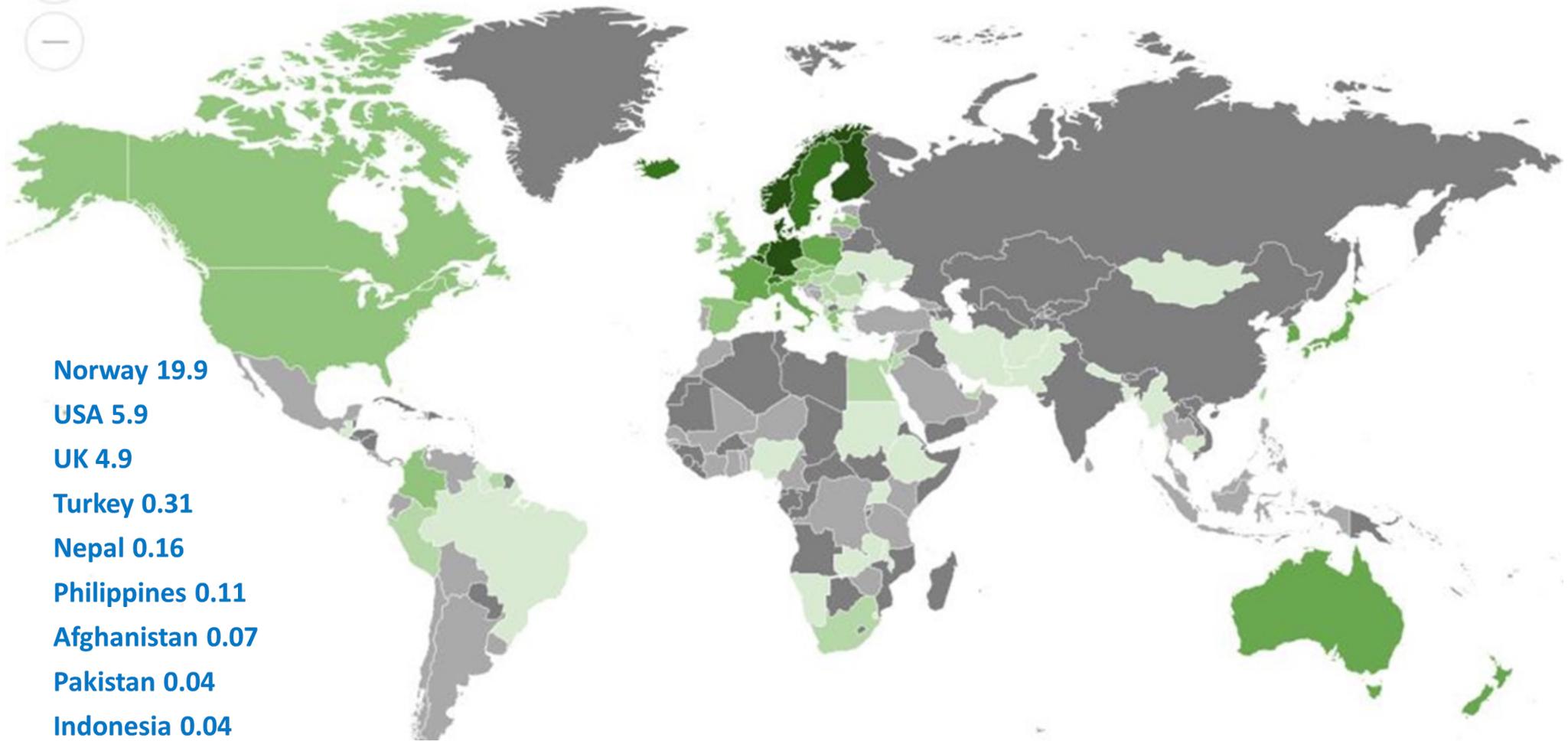
GIS analysis and cartography
P. Peduzzi, ISDR, UNEP/GRID-Europe, 2009





Practising physical therapists per 10,000 population

(Reference year 2017)



Norway 19.9

USA 5.9

UK 4.9

Turkey 0.31

Nepal 0.16

Philippines 0.11

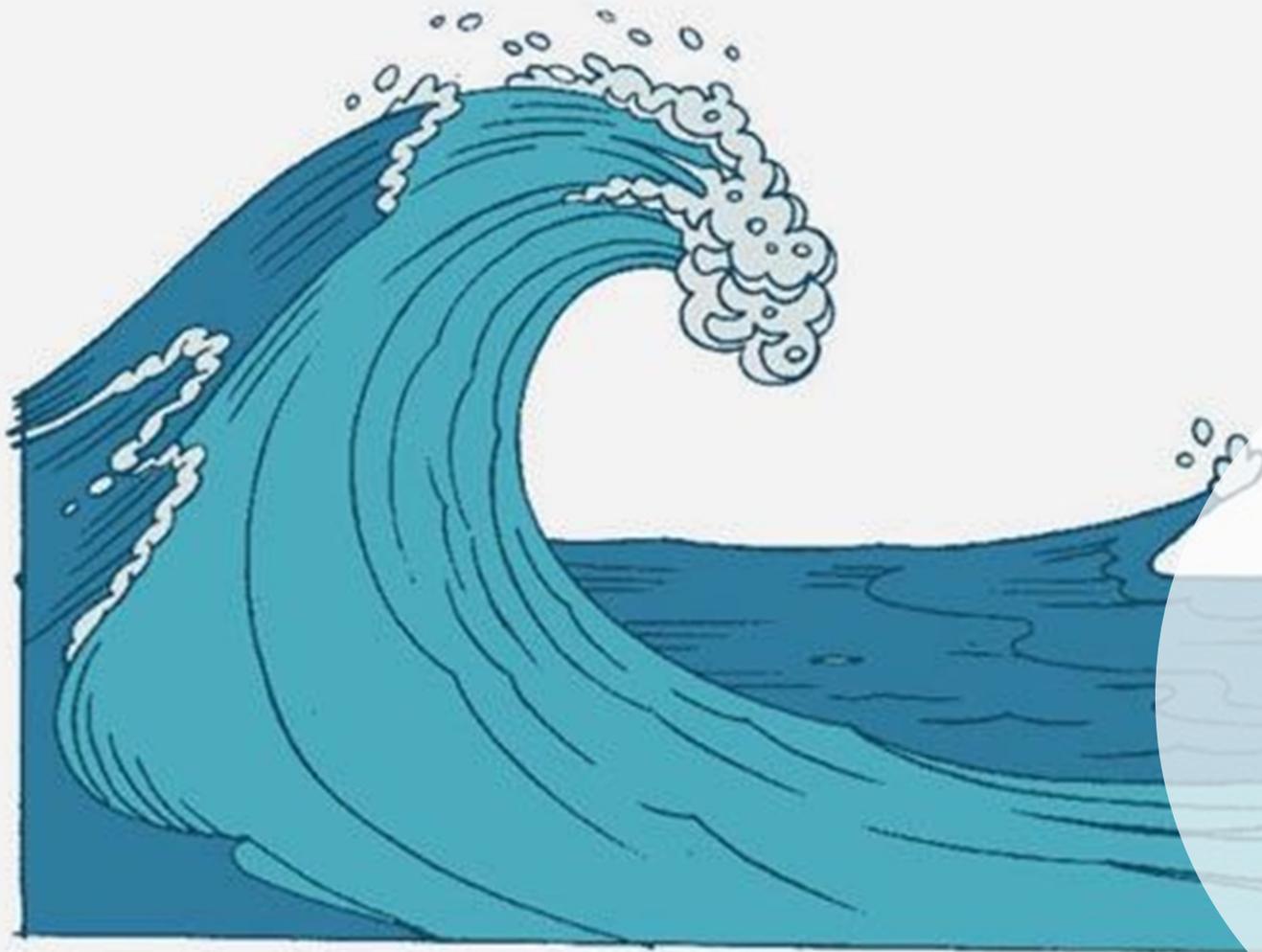
Afghanistan 0.07

Pakistan 0.04

Indonesia 0.04

Not just about number of therapists...

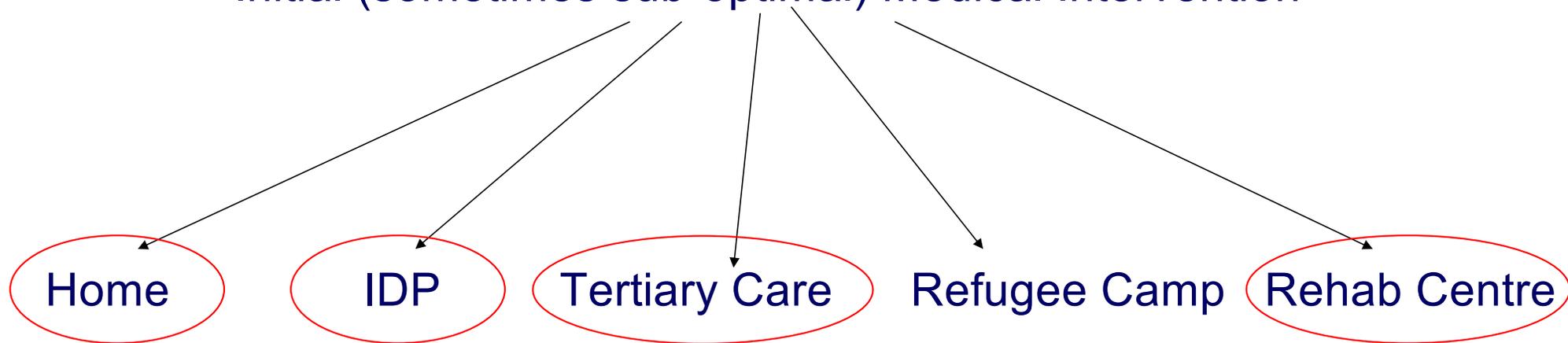
- Integration across all levels of health care, including acute care
- Specialist services (such as for spinal injury or burns)
- Training in trauma care



Challenge 2

Continuity of Care...

Initial (sometimes sub-optimal) Medical Intervention



Region	Population (estimate)	Adult rehab at start of conflict?
Aragatsotn	129,800	No (but KOSH)
Ararat	258,900	No
Armavir	266,600	No
Gegharkunik	231,800	No
Kotayk	253,900	No
Lori	225,000	No
Shirak	243,200	Gyumri (Aryeh Kuperstok)
Syunik	139,400	No
Tavush	125,500	No
Vayots Dzor	50,800	No



Challenge 3

Better Responses mean a higher
rehabilitation need, not a lower one



Challenge 4:

Rehabilitation remains an
afterthought





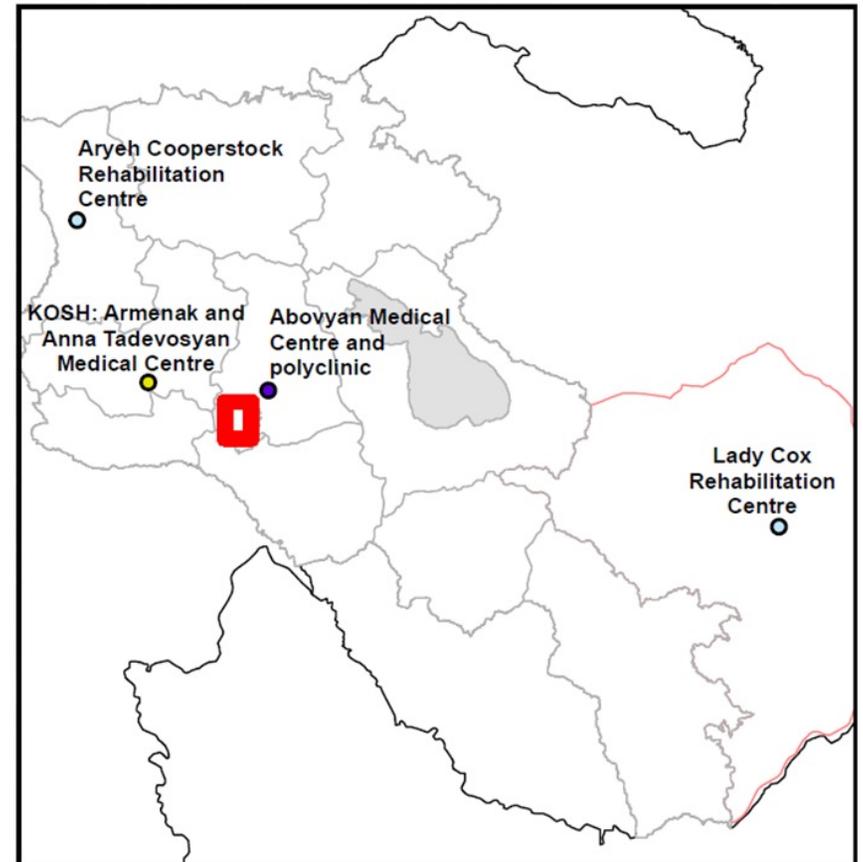
Rehabilitation
2030

- Rarely included formally in preparedness
- Often considered too late in response
- Not an integrated part of planning
- Patients lost to follow up, gaps realised too late...

For Armenia

Same challenges as in many countries;

- limited integration of rehabilitation into acute care
- Heavy concentration of services in the Yerevan,
- Over-emphasis on inpatient/ institutional models of care
- Limited experience in adult trauma rehabilitation (though some excellent services)
- Complex financing models for rehabilitation services.



Immediate Priorities of Members of the Trauma Rehab Working Group (in Febraury)

1 Coordination of response

2 MDT service in region

3 Trauma training

4 Care Pathways/protocols

5 Coordination of training

6 Development of patient information leaflets

7 Coordination of equipment

8 Strengthen SCI Services

9 Adult wheelchair services

Conflict as a (long term)
opportunity to build
back better



Working Group Priorities for Health Systems Strengthening:

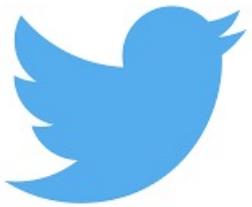
1	Protected Professional Titles and regulation.
2	Increased Practical training at undergraduate level
3	Minimum standards of practice for centres
4	Rehabilitation leadership and coordination
5	Common data set and record keeping
6	Rehab in primary care/community
7	Strengthen specialist services
8	Rehab in acute/hospital level care
9	Availability of quality assistive products



Summary

- Conflict as an opportunity to build back better
- Very positive steps by authorities, national responders, diaspora.
- Long term health systems strengthening for rehabilitation – but needs to be coordinated.
- Sustainability now is key: Collaboration and engagement by all actors – UN, INGO, Diaspora, Private Sector, Government Sector and all government ministries – under leadership of national authorities.

Thank you!



PeteSkelton4

skeltonp@who.int