



AAFP GLOBAL HEALTH SUMMIT
Primary Health Care and Family Medicine: Health Equity for All

Health Equity Issues in Disasters – The Role of Family Physicians
 2019 AAFP Global Health Summit, Albuquerque, New Mexico
 Kim Yu, MD, FAAFP, Vituity, California, USA
 @drkkyu
 #inspirecreatelead

Types of Disasters

<p>Natural</p> <p>Meteorological (eg, hurricane, blizzard, heat/cold wave)</p> <p>Geological (eg, earthquake, volcanic eruption, flood)</p> <p>Other (eg, fire, explosion, disease outbreak)</p>	<p>Accidents</p> <p>Transportation (eg, airplane, bus, train)</p> <p>Structural (eg, building or bridge collapse)</p> <p>Nuclear (eg, radioactive waste release, meltdown)</p> <p>Agricultural or Industrial (eg, hazardous chemical or biological spill or other exposure, fire, explosion)</p>	<p>Intentional Acts of Violence</p> <p>Bombing</p> <p>Shooting</p> <p>Nuclear/Radiological (eg, fissile bomb, "dirty" bomb, or other types of radiological poisoning)</p> <p>Biological Agent Bacteria, Virus, Toxin</p> <p>Chemical Agent Nerve agent, Blister agent, Precursors, Choking Agents, Blood agents, Riot control agents</p>
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Issues or challenges

A sizable portion of physicians (48-56 %) report a lack of training regarding disasters

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Local governments without adequate disaster management plans

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Definition of a Disaster

A sudden calamitous event bringing great damage, loss, or destruction

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Issues or challenges

Lack of resources

<ul style="list-style-type: none"> • Energy Generators • Water storage • Food storage • Medications back up • Sanitizing and cleaning materials • Construction materials • Means of communication with other countries 	<ul style="list-style-type: none"> • Refrigeration • Dialysis • Oxygen supply • Air conditioning
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Disaster Risk Reduction

Disaster risk reduction is a systematic approach to identifying, assessing and reducing the risks of disaster. It aims to reduce socio-economic vulnerabilities to disaster as well as dealing with the environmental and other hazards that trigger them.

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Sendai Framework for DRR

• Aims for the following outcomes:
The **substantial reduction of disaster risk and losses in lives, livelihoods and health** and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries



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Sendai Framework for Disaster Risk Reduction

This is an international document which was adopted by the United Nations member states between 14th and 18th of March 2015 at the World Conference on Disaster Risk Reduction held in Sendai, Japan in June 2015.

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Four priorities for action

Disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment.

Such knowledge can be used for **risk assessment, prevention, mitigation, preparedness and response.**

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Sendai Framework for Disaster Risk Reduction (2015–2030)

The Sendai Framework is a 15-year, voluntary, non-binding agreement which recognizes that the State has the primary role to reduce disaster risk but that responsibility should be shared with other stakeholders including local government, the private sector and other stakeholders.

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Four priorities for action

Priority 1. Understanding disaster risk



Disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure or persons and assets, hazard characteristics and the environment .

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Four priorities for action

Priority 2. Strengthening disaster risk governance to manage disaster risk



Disaster risk governance at the national, regional and global levels is very important for prevention, mitigation, preparedness, response, recovery, and rehabilitation. It fosters collaboration and partnership.

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Seven Global Targets

- REDUCE
 - Mortality
 - Affected people
 - Economic loss
 - Damage to critical infrastructure & disruption of basic services
- INCREASE
 - Countries with national & local DRR strategies
 - International cooperation to developing countries
 - Availability and access to multi-hazard early warning systems & disaster risk information and assessments

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Four priorities for action

Priority 3. Investing in disaster risk reduction for resilience



Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment

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Health Equity

• "Health equity" = ideally everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential.



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Four priorities for action

Priority 4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction



The growth of disaster risk means there is a need to strengthen disaster preparedness for response, take action in anticipation of events, and ensure capacities are in place for effective response and recovery at all levels. The recovery, rehabilitation and reconstruction phase is a critical opportunity to build back better, including through integrating disaster risk reduction into development measures.

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A reminder




PC Kim Yu, MD

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Disparities in Disasters

- Access to Resources and Health Services
- Exposure to Hazards
- Inequalities
- High Vulnerabilities to Disease
- Poverty
- Environment

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Crisis in Flint Water

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Roles in Disaster

Train to provide on site intensive care, urgent care and trauma informed care

Anticipate where and how you may be needed

Avoid starting treatment too late

Training should be aimed at events that are appropriate for the geographic area and facility type

Events that are most likely and of highest impact to the facility should be listed in the facility's hazard vulnerability analysis

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Advocacy

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Complex Disaster

- Roles of Government
- Roles of Organized Structures
- NGOs
- Crisis Standards of Care
- Quarantelli Paradigm – incident command centers, DMAT etc.

Up to 90% of care after a disaster is provided in the outpatient space

Quarantelli (1995) on Need for Minimum Consensus

“... To be concerned about what is meant by the term ‘disaster’ is not to engage in some useless or pointless academic exercise. It is instead to focus in a fundamental way on what should be considered important and significant ...”

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Hurricane Maria September 18, 2017

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Lives saved - thousands

60 tons of medicines, medical supplies & equipment to Puerto Rico mostly on private planes, airline donations, & purchasing on island. On the receiving end were hospitals, clinics, cancer centers, shelters, senior citizens, and group homes for children in 70 of the 78 municipalities of Puerto Rico, including the offshore islands of Vieques and Culebra.

ABC Channel 7 news
WISC TC Channel 3 news

Multiple radio and newspaper or magazine articles, blogposts, facebook live events, tweets, even Catholic World health news!

Jeep brigade traveled through closed roads delivering medications, supplies, food and water.

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Coordinating your Team

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Consequences of Advocacy

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Keeping your team safe

- Dan Diamond
- Haiti Earthquake

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Options for Water

Filters – personal – lifestraw
household – biosand
community based - waterstep

Other: Silver impregnated water purification bars

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Planning for the future

- Triage training
- Supply lists and chain
- Build your team
- Find community partners
- Store supplies
- Communication

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Prepare prepare prepare

- Emergency Bag
- Food
- Water
- Medications
- Light
- Power
- Psychological First Aid Training



Hurricane Dorian, Bahamas Sept, 2019

EVERY LITTLE BIT COUNTS
LET'S HELP BAHAMAS
Fundraise for the benefit of the victims of Dorian's Hurricane.

In 2017, our group Doctoresa Baricosa worked with these amazing organizations to provide medical relief and help to the victims of hurricane Maria. Today is for Bahamas!

Please donate & share on your pages. Every little bit counts. The links to donate are listed on this post.

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Provide what is needed

- Food
- Water
- Clothes
- Underwear
- Housing
- Body Bags
- Trauma Informed Physicians
- Child Life Specialists
- Wheelchairs
- Hope



Barriers to addressing disparities and vulnerability in disasters:

- Government mistrust.
- Organizational vulnerabilities
- Layered disasters. Hazards tend to harm segments of the population that were already disadvantaged before a disaster.
- Misconceptions - segments of the populations are marginalized, causing systematic exclusion from the social environment.
- Cost

Training with contextual adaptation

- Advantage of training is a physician workforce that has a higher response rate and is more comfortable in their roles in a disaster

Inclusion
Representation
Engagement

Collaboration
Engagement

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Other resources

Think of your circles!

- Federal
- Local
- State Chapters
- AAFP Foundation
- Facebook groups
- Member Interest Groups
- WONCA
- Use of Social Media
- Others

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Health Equity Tools

• Neighborhood Navigator

neighborhood navigator

As part of a continued commitment to help our members address social determinants of health (SDOH) at point of care, the AAFP's EveryONE Project offers tools for **screening patients to identify social needs**, and **addressing health equity in your practice**.

The Neighborhood Navigator provides the next step for improving social determinants of health among your patients.

As an AAFP Member, you can use this interactive tool at point of care to connect patients to resources and programs in their neighborhoods. This tool lists over 40,000 social services by zip code, including:

- Food
- Transportation
- Legal aid
- Housing
- Employment aid
- Financial

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Recommended Disaster Medicine Curriculum Guidelines for Family Medicine Residents

Medical Knowledge	Patient Care	Systems-based Practice
A basic understanding of the primary importance of safety in disaster responses, including personal protective equipment, decontamination, and site security	An understanding of the principles of triage and the ability to effectively perform triage in a disaster setting. The clinical competence to provide effective care in a setting of extremely limited resources.	A basic knowledge of the National Incident Management System (NIMS) and the Incident Command System (ICS), including its application to the planning, coordination, and execution of disaster responses. An understanding of psychological first aid and caring for responders.

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Health Equity Tools

• Health Landscape

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Online Resources for Training and Practice of Disaster Medicine Training Resources

- Advanced Trauma Life Support: www.facs.org/trauma/atls/index.html
- American Heart Association (advanced cardiac life support [ACLS] course): www.americanheart.org/presenter.jhtml?identifier=3011972
- American Heart Association (pediatric advanced life support [PALS] course): www.americanheart.org/presenter.jhtml?identifier=3012001
- Comprehensive Advanced Life Support (CALS): www.calsprogram.org/
- Federal Emergency Management Agency (NIMS, ICS, and other online training): www.fema.gov/about/training/index.shtm
- International Critical Incident Stress Foundation (management information and training): www.icisf.org/
- JumpSTART Pediatric Triage Tool: www.jumpstarttriage.com/
- National Disaster Life Support Foundation: www.bdls.com/

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General Resources

- American Academy of Family Physicians: www.aafp.org
- American Hospital Association (AHA) Emergency Readiness: www.hospitalconnect.com/aha/key_issues/disaster_readiness/
- American Medical Association: www.ama-assn.org
- Association of State and Territorial Health Officials: www.astho.org
- Centers for Disease Control and Prevention: www.cdc.gov
- Centers for Disease Control and Prevention Emergency Preparedness and Response: www.bt.cdc.gov
- Federal Emergency Management Agency: www.fema.gov
- Johns Hopkins Office of Critical Event Preparedness and Response (CEPAR): www.hopkins-cepar.org/
- US Army Medical Research Institute of Infectious Diseases: www.usamriid.army.mil/index.htm
- US Department of Health and Human Services National Disaster Medical System (NDMS): www.hhs.gov/aspr/opeo/ndms/

Conclusion

- Prepare and Respond with a Health Equity Lens
- We need to train and equip ourselves
- We need to learn field-level care, how to deal with crush and blast victims, and how to deal with the emotional issues of patients, their loved ones, and our co-workers.
- We need to connect and collaborate with others.
- We are #FamilyMedicineStrong!



Role Play

- Break into teams
- Assign the following roles: Team Leader, Supply coordinator, Transportations, Safety manager, Food/water, Communications. Also assign a time keeper to keep your team on task. You have 7 minutes. Be prepared to report out what your group's plan will be.
- Create a flow sheet highlighting what you will do for each role in the event of the following disaster
- Disaster description – you are in a community of 10,000. An earthquake 8.3 on richter scale has devastated your town. Many buildings collapsed. There are only 5 doctors to help. The hospital in town is non operational. You have one small clinic that has one room that is usable. You have intermittent electricity, and little water left. Only one street comes in and out of town. The nearest large town is 6 miles away. They also are devastated.

Thank you for being part of the Global Family Medicine Revolution!



#InspireCreateLead @drkyu

Conclusion

“do something, do more, do better.”

- Professor Sir Michael Marmot, October 2019



- Family Physicians are **key** players in a disaster – our place in the community is so much greater than just our office and hospital work.
- Health Equity becomes even more important during times of disaster

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