



Evidence and healthcare needs during disasters

Aasim Ahmad & Syed Mamun
Mehmood

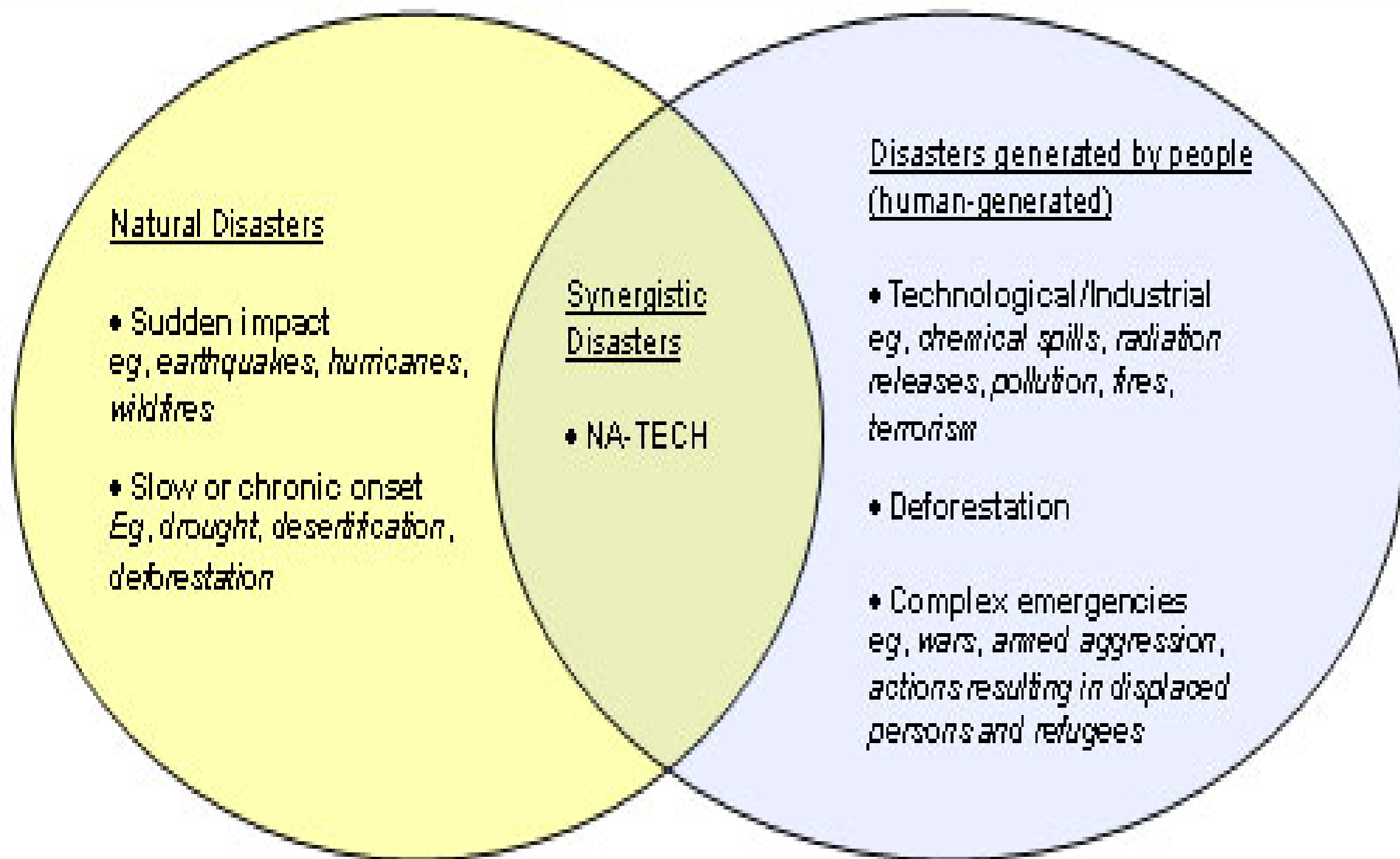


Outline of presentation

- Disasters
- Results of disasters
- Health care needs
 - Evidence
 - Quality
 - Standards
 - Guidelines
- Areas of scientific inquiry
- Ethical issues in disaster research
 - Paucity of ethical guidelines
 - vulnerability of participants,
 - to the quality or lack thereof of truly ‘informed’ consent,
 - To which standard
 - difficulty in assessing benefits and risks,
 - a ‘philanthropic’ misconception and
 - ability and preparedness of members of ethics committees to review these complicated protocol in emergencies.

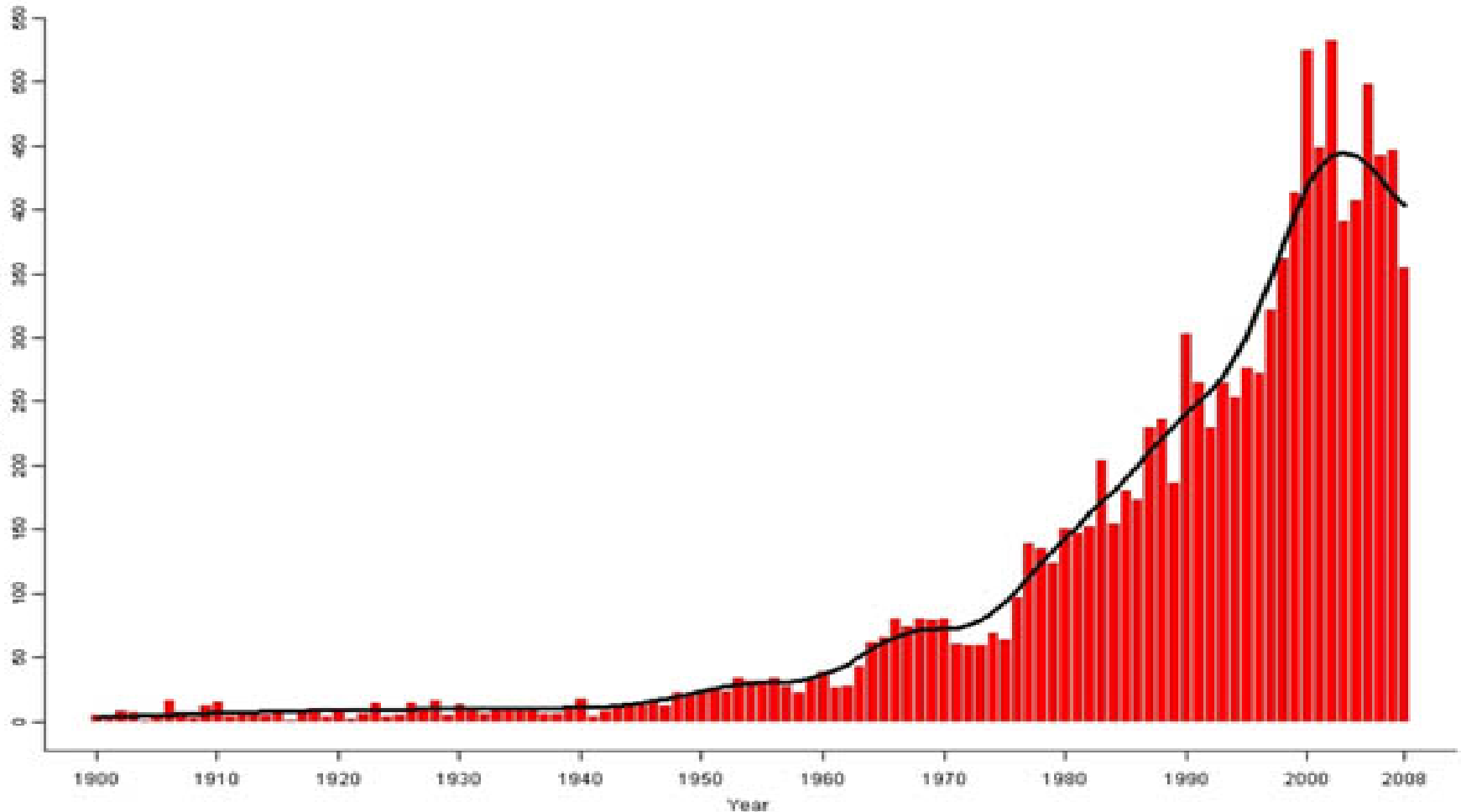
Disaster

- A serious disruption of the functioning of a society, causing widespread human, property or environmental losses which exceed or stretches the ability of the affected community to cope. They
- They can happen at any time, affect anyone any community and any state, they can be sporadic or regular



Frequency of natural disasters have increased

Natural disasters reported 1900 - 2008
Source: Emergency Events DB <http://www.emdat.be/>



2010

Estimated financial losses worldwide
of US\$222 billion

2011

Estimated financial losses in Japan
more than US\$300 billion

2010

Over 260,000 fatalities were caused
by natural disasters and catastrophes
&
many more affected and injured

Disaster

- Result in damage, displacement, and death of large numbers of people
- Create an imbalance between the capacity and resources of the society and the needs of the survivors and the affecters
- Exaggerates disparities that already exist within societies

- Disasters create novel and unique combination of problems in extreme and peculiar circumstance, therefore these problems then can only be addressed and studied in these situations

Standards

- *“A 4 year old girl child was brought to the children’s hospital in Islamabad 3 weeks after the devastating earthquake that hit the northern areas of Pakistan in early October 2005. She had an amputated right arm, with disarticulated elbow joint and a jutting humerus, without any muscle cover. It so transpired that the initial surgery was performed in a makeshift camp by the surgeons of an international aid organization. Not one of the doctors involved was a qualified surgeon”*

Robyna Khan

Standard of care

To what standard are health providers accountable to

- “Crisis standards of care”
- Reasonable physician standard!

- Once believed that ‘outbreak of infectious diseases is rare in a disaster unless a disease was previously endemic in the community’
- Not so cholera outbreak in Haiti

Hippocrates 450 BC

- “But conclusions that are merely verbal cannot bear fruit, only those do which are based on demonstrated facts (evidence). For affirmation and talk are descriptive and treacherous. Wherefore one must hold fast to facts....if one is to acquire that ready and infallible habit, which we call medicine”.
(Parangeliai 6, Precepts VI)

In disasters

- Do we know all that we need to know to insure that everyone (first responders, disaster victims or survivors and the general public) get the kind of effective services they deserve?

If the answer is no, then

- Is it ethical not to conduct such research that answers the above question?

Areas of scientific inquiry in disaster

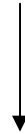
- Prevention or mitigation
- Preparedness
- Dealing with the event & response
- Recovery
 - issues related to short &
 - long- term

Types of research

Personal reflection

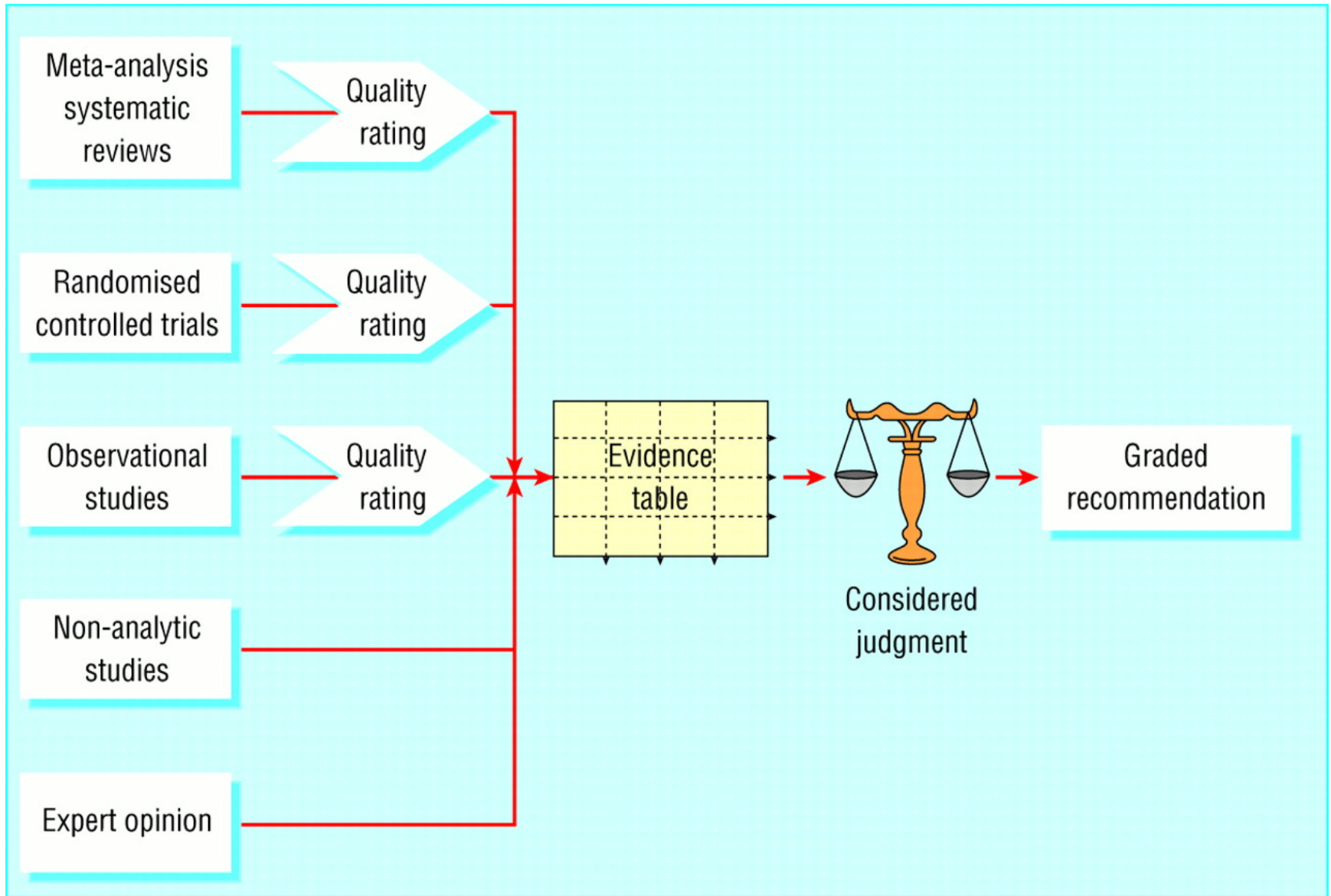
Anecdotal

Observational



RCT

Overview of the process for developing and grading guideline recommendations.



Generating evidence or even collecting data

- Respecting human dignity
- Cultural sensitivity
- Choices to individuals

Differences in ethical approaches

- Clinical ethics
 - Individualistic
 - Autonomy based
- Public health ethics
 - Communitistic
 - Restrictive
- Disaster ethics
 - Utilitarianistic
 - Humanistic

Disaster research ethics

- Professionally competent
- Relevance to disaster situations
- Voluntary, free Informed consent
 - Is it achievable?
 - Philanthropic misconception
 - inducement
 - Are crucial studies in which the unavoidable tradeoff in risk and benefit may be accentuated by uncertainty of achieving truly informed and unforced consent, ever justifiable?
 - Can there be studies with out consent?

- Non-exploitative

- *The selection of research participants must be made on scientific reasons and not based on accessibility, cost, gender or malleability.*

- *The research should not impose additional burdens on people who are already traumatized, and on the local infrastructure*

- **Distributive justice**

- *Undertake only those studies that are urgent and vital to the health and welfare of the study population*
- *Restrict studies to those questions that cannot be addressed in any other context*
- *Restrict studies to those that would provide important direct benefit to the individuals recruited to the study or to the population from which the individuals come*

- Dissemination of results
- Ethics Review
 - Training
 - Timing
 - Avoiding duplication
 - Review of a generic protocol prior to disaster

Disaster research ethics

- Paucity of ethical guidelines in these specific situations
- The vulnerability of participants
- Quality or lack thereof of truly ‘informed’ consent
 - ‘Philanthropic’ misconception
- Standard of care
- Difficulty in assessing benefits and risks
- Ethics committees
 - Ability & preparedness of members
 - Complicated protocol in emergencies

As nations prepare a disaster plan shouldn't academics, researchers and bioethicists prepare a plan for ethical research for a future disaster

Thank you

