Bat Out of Hell!
The Dignity & Horrors of Survivors of Catastrophes

Professor Richard Williams OBE TD
Honorary Professor
HCRI
University of Manchester
Richard Williams’ appointments

- Honorary Professor, Humanitarian and Conflict Response Institute, University of Manchester
- Honorary Consultant Disaster Psychiatrist & Public Mental Health Physician, Public Health England
- Professor of Mental Health Strategy, Welsh Institute for Health & Social Care, University of South Wales
- Consultant Child and Adolescent Psychiatrist, Aneurin Bevan Health Board
- Convener of Examiners for the Diploma in the Medical Care of Catastrophes for the Worshipful Society of Apothecaries of London
- Presidential Lead Officer of the Royal College of Psychiatrists for Disaster Management

Disclosure

Richard Williams has no relevant financial relationships or conflicts of interest to disclose
Learning objectives

1. Summarise key myths & misconceptions about the effects on, & care for people affected by disasters

2. Summarise the psychosocial & mental health responses of people to extreme events, disasters, terrorism, major incidents and emergencies

3. Define psychosocial resilience, & explore social identity & the importance of social support

4. Identify the implications of these findings for policy, practice & people who live on the Somerset Levels
Misconceptions & Realities
Common misconceptions about disasters

1. Failure to bury dead bodies creates a health hazard
2. Disease epidemics are inevitable
3. People survive for a long time under rubble
4. Looting and breakdown of social order is widespread
5. Disaster zones should be presided over by the military
6. Panic and flight is widespread
7. Survivors are dazed and apathetic
8. The utility of medicines and field hospitals
9. Humanitarian assistance is not necessarily given or refused on the basis of need
10. There are heroes and villains
11. PTSD is widespread and the main psychosocial outcome
12. Crowds are bad for people and society
A conceptual and ethical challenge

• Most extreme events are distressing and stressful and some are catastrophic and overwhelming

• But
  • How should we understand people’s feelings and responses?
  • What signifies that people have become psychologically unwell?
  • Whose perspectives are the most influential on what happens during the coping and recovery phases
    • Top down or bottom up planning?
    • Avoiding the risks of institutional arthritis?

• And, how should we help people to cope well?
The horrors: the medical model

• Military personnel
  • PTSD: 1.6 - 6% after deployment to Iraq or Afghanistan
    But, increased risk for reservists
  • Alcohol misuse: 16 - 20%
  • But, demand falling on military health services, the NHS and service charities is likely to increase over time

• Humanitarian aid workers
  • Deployment is associated with rises in prevalence of anxiety symptoms and depression
  • Extraordinary / chronic stress during deployment contribute to increased risk of burnout & depression
  • But, social support is associated with people experiencing lower levels of distress, depression, burnout, and greater life satisfaction
Economic downturns & mental ill health
Knapp 2012

• A drop in income, unmanageable debt, housing problems and social deprivation can lead to:
  • Lower well-being
  • Lower resilience
  • More needs arising from mental illness
  • Higher levels of alcohol misuse
  • Higher suicide rates
  • Greater social isolation
  • Worsened physical health

• The effects of macro-economic downturn can affect the mental health of some adults and their children

• The causal links operate in both directions
People’s responses to major events

Direct effects
a. Primary and secondary stressors cause stress and, often, distress
   1. Immediate and short-term
      a. Resilient responses
      b. Non-disordered distress
      c. Possibility of (? adaptive ?) neuropsychological changes in response to acute stress
   2. Medium-term
      a. Persistent distress maintained by secondary stressors
      b. Grief
b. Mental disorders
   1. Anxiety disorders (e.g. PTSD)
   2. Depression
   3. Substance use disorders
   4. Impacts on personality

Indirect effects - disasters increase psychiatric and physical morbidity because they change the social conditions that shape mental health through:
   a. Increased poverty
   b. Domestic and community violence
   c. Threats to human rights
   d. Changed social & societal relations
People’s Psychosocial Responses to Traumatic Events & Circumstances
## Indicators of distress

<table>
<thead>
<tr>
<th>Emotional reactions</th>
<th>Cognitive reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shock and numbness</td>
<td>Impaired memory</td>
</tr>
<tr>
<td>Fear and anxiety</td>
<td>Impaired concentration</td>
</tr>
<tr>
<td>Helplessness and/or hopelessness</td>
<td>Confusion or disorientation</td>
</tr>
<tr>
<td>Fear of recurrence</td>
<td>Intrusive thoughts</td>
</tr>
<tr>
<td>Guilt</td>
<td>Dissociation or denial</td>
</tr>
<tr>
<td>Anger</td>
<td>Reduced confidence or self-esteem</td>
</tr>
<tr>
<td>Anhedonia</td>
<td>Hypervigilance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social reactions</th>
<th>Physical reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>Insomnia</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>Hyperarousal</td>
</tr>
<tr>
<td>Irritability</td>
<td>Headaches</td>
</tr>
<tr>
<td>Interpersonal conflict</td>
<td>Somatic complaints</td>
</tr>
<tr>
<td>Avoidance</td>
<td>Reduced appetite</td>
</tr>
<tr>
<td></td>
<td>Reduced energy</td>
</tr>
</tbody>
</table>
Indicators of acute stress (as used in TRiM)

The person:

1. Has upsetting thoughts or memories about the event that come into the mind against the persons will
2. Has upsetting dreams about the event
3. Acts or feels as if the event is happening again
4. Feels upset about reminders of the event
5. Has bodily reactions (such as fast heartbeat, stomach churning, sweatiness, dizziness) when reminded of the event
6. Has difficulty falling or staying asleep
7. Is irritable or has outbursts of anger
8. Has difficulty concentrating
9. Has heightened awareness of potential dangers to the self or others and being jumpy or being startled at something unexpected
10. Reports or shows dissociation (e.g. someone feeling as if they or the world is not real, things seeming in slow motion, memory loss of important aspects of the event) during the interview
Psychosocial responses of a population
Psychosocial Resilience
The concept of psychosocial resilience

<table>
<thead>
<tr>
<th></th>
<th>GENERATIONS</th>
<th>1ˢᵗ: Coping with stress</th>
<th>2ⁿᵈ: Recovery from being stressed</th>
<th>3ʳᵈ: Promoting Adaptability</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping Abilities of Particular Persons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamic Interactive Processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Psychosocial resilience - definitions

- A process linking a set of adaptive capacities to a positive trajectory of functioning and adaptation after a disturbance. 
  Norris, 2010

- The capacity of a dynamic system to withstand or recover from significant challenges that threaten its stability, viability, or development. 
  Masten, 2011

- Resilience describes social processes by which people act singly or together to mitigate, moderate or adapt to the effects of events. 
  Williams, 2012

- Personal
  A person’s capacity for adapting psychologically, emotionally and physically reasonably well and without lasting detriment to self, relationships or personal development in the face of adversity, threat or challenge. 
  Williams, 2007

- Collective
  Collective resilience refers to the way crowds of people express and expect solidarity and cohesion, and thereby coordinate and draw upon collective sources of support and other practical resources adaptively to deal with adversity. 
  Drury, 2009
Core features of psychosocial resilience

1. Social support
   • The abilities to accept and use social support and
   • The availability of support
     are two of the key features of resilience that may have greater effects than exposure to events

2. Strong acceptance of reality

3. Is influenced profoundly by people’s experiences in childhood

4. Resilience relates to people’s:
   • Capacities for secure attachments
   • Intelligence
   • Temperament
   • Belief in selves supported by strongly held values
Groups and social identity

- Groups provide us with a sense of social identity
- Groups can be defined as relational structures with which we engage and which help to define who we are
- Social identity is knowledge that we belong to certain social groups together with the emotional and value significance to us of this group membership
- Social identity is the mechanism that makes group behaviour possible
- Group membership has the capacity to enrich our lives as sources of:
  - Personal security
  - Social companionship
  - Emotional attachment
  - Intellectual stimulation
  - Collaborative learning
  - Leadership
Collective resources

Resilience occurs when resources are sufficient to buffer or counteract the effects of stressors

Collective resources include:

• The level and equitable distribution of economic resources
• A culture of care
• Psychological safety within families and working groups
• People’s and groups’ social capital
• Information & communication
• Translational leadership

Social support

• Consists of social interactions that provide people with actual assistance, but also embed them in a web of relationships that they perceive to be caring and readily available in times of need
CBRNe field exercises on maximising the public’s cooperation, compliance and satisfaction with mass decontamination
Figure 2. A path model of the data collected at time 2, following the mass decontamination field experiment.
doi:10.1371/journal.pone.0089846.g002
Gaining public cooperation

Current research on mass decontamination after a chemical spillage:

• How we provide information and give sufficient information is critical
• How the responders behave is very important
• Your aim should be to facilitate a shared social identity among strangers, and, if possible, a shared identity that involves the public and the responders
• These actions result in:
  • Trust
  • Cooperation
  • More efficient and effective decontamination
  • Less distress
Trajectories of People’s Psychosocial Responses to Traumatic Events & Adversity
**Fig. 1** Conditional model (including covariates) of post-traumatic stress over time among 3393 Millennium Cohort participants with a single deployment between baseline (pre-deployment) and first follow-up.

Post-traumatic stress disorder (PTSD) assessed using the PTSD Checklist – Civilian Version.
### Trajectories of response

[adapted from the work of Norris]

<table>
<thead>
<tr>
<th>Trajectory</th>
<th>Nature of trajectory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>Initially, moderate to severe experiences of stress/distress followed by steep decrease</td>
</tr>
<tr>
<td>Recovery</td>
<td>Initially, moderate to severe experiences of stress/distress followed by gradual decrease</td>
</tr>
<tr>
<td>Relapsing +/- or remitting problems</td>
<td>Initially, moderate to severe experiences of distress, often associated with dysfunction, followed by patterns that are not stable over time</td>
</tr>
<tr>
<td>Delayed dysfunction</td>
<td>Mild or moderate experiences of distress that are not accompanied by dysfunction initially, but dysfunction follows later</td>
</tr>
<tr>
<td>Chronic dysfunction</td>
<td>Medium and long-term experiences of moderate to severe distress that is accompanied by dysfunction and/or occurrence of disorders that are stable over time</td>
</tr>
</tbody>
</table>
General Principles for Immediate & Medium-term Intervention
Core principles for preparing and supporting people who are affected

1. Early intervention

   “Early interventions in communities suffering mass trauma should consist of general support and bolstering of the recovery environment rather than psychological treatment”  
   Shalev, 2004

2. Practical interventions based on PIES

   • Proximity
   • Immediacy
   • Expectancy
   • Simplicity of responses
Core principles for preparing and supporting people who are affected

3. Approaches that are based on personal psychology
   • Based on Hobfoll’s 5 principles
   • Peer support
   • Training & supervision

4. Approaches that are based on social psychology by supporting people’s social identities
   • Leadership
   • Restoring families and community groups
   • Re-open schools
   • Restore work opportunities
   • Psychological first aid
Approaches based on the 5 principles of Hobfoll *et al.*

1. Helping people to normalise their experiences while being aware that some people do develop a disorder
2. Enabling people by providing social support
3. Providing reflective listening and honest, accurate and timely information
4. Helping people to restore their agency and perceptions of themselves as effective persons
5. Enabling people to seek further help
Psychological first aid

Psychological first aid (PFA) is: “providing a supportive and compassionate presence designed to enhance natural resilience and coping, while facilitating access to continuing care, if it is necessary”

modified after Everly & Flynn, 2006
## Psychosocial and mental health care interventions after extreme events

<table>
<thead>
<tr>
<th>Level</th>
<th>Intervention</th>
<th>Target Population</th>
<th>Examples of Interventions</th>
<th>Interventions Conducted by</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Psychological first aid (PFA)</td>
<td>Most of the people who are affected</td>
<td>Restoring immediate safety, Restoring contact with loved ones</td>
<td>All responders and aid workers</td>
</tr>
<tr>
<td>4</td>
<td>Community development</td>
<td>Communities after large-scale events</td>
<td>Schools, sports, meetings, actions to unite groups of people</td>
<td>All responders and aid workers</td>
</tr>
<tr>
<td>5</td>
<td>Skills for psychosocial recovery (SPR)</td>
<td>People whose distress is sustained by bereavement or secondary stressors</td>
<td>Brief needs assessment, Problem-solving, Social support</td>
<td>Healthcare practitioners and workers trained in the skills</td>
</tr>
<tr>
<td>6</td>
<td>Psychosocial interventions for medium- &amp; long-term problems</td>
<td>People whose distress is sustained and associated with functional impairment</td>
<td>Trauma-focused cognitive behaviour therapy</td>
<td>Staff of mental healthcare facilities</td>
</tr>
</tbody>
</table>
PFA activities and interventions

1. Initiating contact and engaging with affected people in a non-intrusive, compassionate and helpful manner
2. Providing immediate and ongoing safety and physical and emotional comfort
3. Stabilising survivors who are overwhelmed and distraught
4. Gathering information to determine immediate needs and concerns and to tailor PFA interventions
5. Providing information on coping, stress reactions etc
6. Providing practical assistance to assist survivors to address their immediate needs and to encourage purposeful activities
7. Assisting reunion with loved ones
8. Linking survivors with sources of social support
9. Sharing experiences (but not forced)
10. Identifying people who need contact with more specialised or longer-term help
10 key messages

1. There are many myths about how groups of people, crowds and masses of people behave during and after emergencies.
2. The most persistent myth is about panic: crowds do panic, but its frequency is greatly exaggerated: this myth leads to erroneous policies & plans.
3. While resilience is the default response, planners and responders should not take it for granted.
4. A substantial minority of people may develop mental disorders and the main ones are substance misuse, anxiety disorders, depression & PTSD.
5. Often, the public and professionals think that PTSD is very likely and the main effect of severe emotional trauma.
6. People may respond to certain types of event by developing psychogenic illnesses.
7. Collective resilience is very powerful.
8. The adaptive capacities of families, groups and communities are mediated through people’s social identities, which provide the powerful effects of social support.
9. Social identity theories predict actions that can be taken to strengthen collective psychosocial resilience that are supported by research.
10. It is important to prove timely and accurate information for people who are affected and the staff who care for them.
References


- Williams R, Bisson J, Ajdukovic D, Kemp V, Olff M, Alexander D, Hacker Hughes J, Bevan P. Guidance for responding to the psychosocial and mental health needs of people affected by disasters or major incidents. At: http://www.healthplanning.co.uk/nato


The Main Determinants of Health