

Emergence of trauma-related mental health needs in the years following natural disaster

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Agenda

- Exposure to natural disasters and traumatic events
- Initial response and expected recovery
- Emergence of trauma related mental health issues over time
- Lack of resources in years following the event
- Clinical presentations
- Barriers to care
- Maintaining factors
- Approaches to assessment, and treatment

Who gets exposed to traumatic events?

- Trauma is a common experience. At least 50-65% of people report one or more Potentially Traumatic Events in their lifetime. (*Creamer, Burgess & McFarlane, 2001; Kessler et al., 1995*)
- Distribution varies by geographical location, occupation, and culture
- Some communities are consistently exposed to war, terrorism, and natural disasters that affect many people (Neria, Nandi, & Galea, 2008)
- Nepal earthquake (2015) is estimated to have killed 9,000 people, injured 22,000, and left hundreds of thousands homeless
- Rescue workers, paramedics, police: PTSD rates 20-45% (see Neria et al., 2008 for a review)

Hurricane Katrina (New Orleans 2005); Black Saturday Bushfires (Australia 2009); Haiti earthquake (2010); Pakistan floods (2010); Cyclone Nargis (Burmese peninsula 2008); Sumatra earthquake and tsunami (2005); Tangshan earthquake (1976) 650,00 + killed.

Exposure & PTSD

DSM 5 Criterion A (one required)

Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:

- Directly experiencing the trauma
- Witnessing, in person, the events as it occurred to others
- Learning that the traumatic event occurred to a close family member or close friend
- Experiencing repeated or extreme exposure to aversive details of the traumatic event (e.g. first responders collecting human remains; police officers repeatedly exposed to details of child abuse)

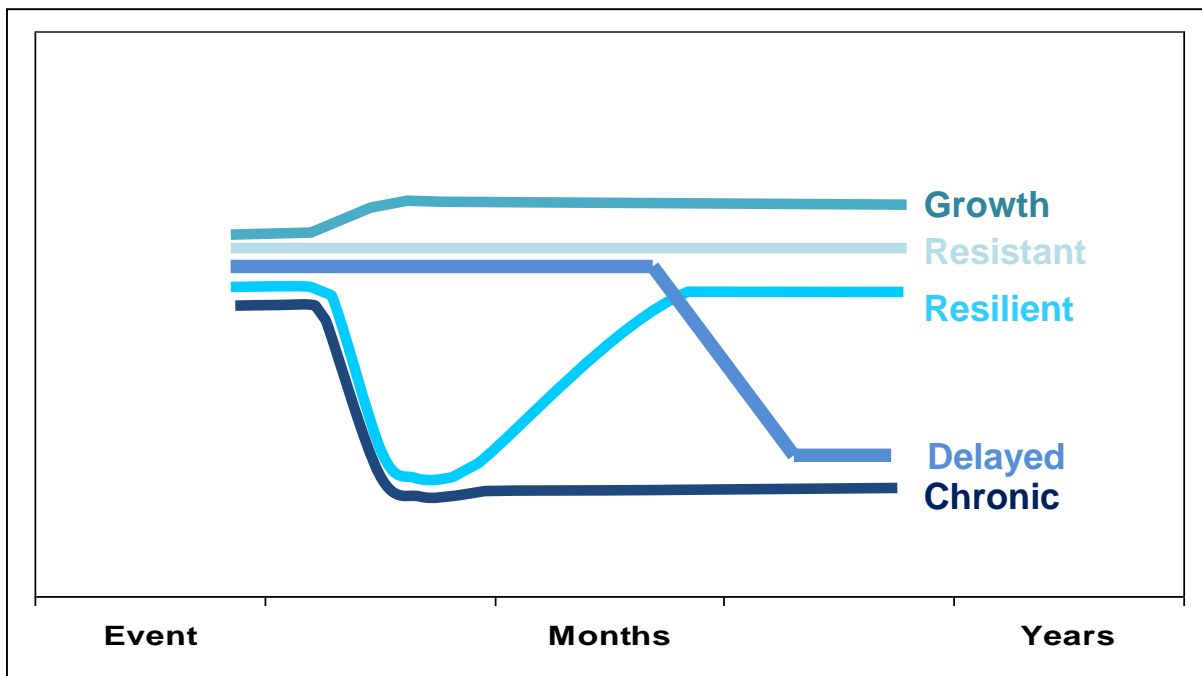
Pattern of response & support post-event

- International, regional, government attention and aid (e.g. funds and/or personnel)
- Individual efforts to find loved ones, grieve, & find food, water, and shelter
- Initial counselling efforts (well intended, often poorly timed or focused)
- Community efforts to 'clean up' and re-establish
- Eventual wind-down in months and years post-event
- For some, delayed trauma related symptoms in following years

Typical response and recovery

- PTSD is an *uncommon* reaction to a *common* event
- However, psychological symptoms can remain or emerge long after trauma exposure:
 - US Oklahoma bombings - citizens reported trauma symptoms 6 years later (North et al., 2005)
 - Canberra bushfires - 39% surveyed remain affected by significant feelings of anxiety, nervousness and sadness 3-years later (Camilleri et al., 2007)
 - Average time to start of psychological treatment following a road traffic or workplace accidents is 5 years (source: TAC/Worksafe Victoria)
 - Experiences post 2009 Black Saturday Bushfires (3-5 years emergence of PTSD)

Typical trajectory post trauma exposure



(Bonnarno, 2005)

Risk factors for development of PTSD

Peri-trauma factors:

- Level of exposure
- Degree of threat to self, exposure to suffering or death of others
- Predictability & perceived controllability
- Peri-traumatic arousal and dissociation

Post-trauma factors:

- Degree of enduring loss and disruption
- Level of ongoing support around daily needs (housing, food, water)
- Level of ongoing support for physical and mental health issues
- Consider Maslow's hierarchy as one applicable model

Predictors of longer term mental health issues

Acute Stress Disorder (ASD) not a reliable predictor (see Bryant, 2003)

- Most people with ASD go on to develop PTSD
- Yet, majority of people with PTSD do not initially have ASD

Predictors (see Bryant 2009)

- Extreme maladaptive appraisals about the experience
- Very strong arousal responses in the month following the event
- Pre-existing psychological vulnerabilities
- Lack of adequate social supports
- Development of intense reactions post-event

Individual risk factors

- Lower socio-economic status and marginalised groups
- The old and very young
- Women
- Heavy prior exposure to trauma (e.g. emergency services = cumulative occupational exposure)
- Pre-existing mental and chronic health conditions
- Indirectly exposed workers within affected communities (e.g., teachers, health workers, clergy, officials)
- Relatives and friends of those affected
- Community members

Key symptoms: what do people report?

Re-experiencing

- *Flashbacks*: Unpleasant, unwanted reminders usually with physiological arousal and anxiety.
- *Nightmares*: signature symptom. Wake up distressed, sweating, heart racing, shaking, confused.
- *Dissociation to a past scene*: (e.g. triggered by helicopters, diesel engines, loud noises.
- *Distress and reactivity*: anxiety, panic, ANGER is very common. (see McHugh et al. 2011)

Avoidance of EVERYTHING!

- Phone calls, visitors, social events of any type, shops, crowds, driving,
- Talking about any theme related to the trauma, talking at all, discussing own issues
- Self-describe as reclusive, hermits, socially avoidant
- Partners describe as like ‘having another child in the family’

Mood: depression vs. negative cognitions

Depression

- Second most common psychological disorder post disasters (Norris et. al., 2002)
- Consider MDD vs. PTSD negative symptoms
- Assess changes in biological functioning (more typical of MDD)
- Probably an academic debate, might not change treatment

Changes in cognition common to PTSD

- 100% conviction that the world is a dangerous place: *Strong focus on 'news' with a 'negative filter'.*
- World full of 'bad people'; unwilling to trust anyone at all
- Blame towards systems, organisations, cultural groups and governments. Strong focus here.
- No interest in any activities at all, perception that will fail any attempts.
- Detached from others; partners and children, very low libido.

Prominent hyperarousal

Persistent awareness of potential threats in the environment:

- Very strong startle response
- Aware of surroundings, people, potential threats
- Sit facing doorway (e.g. coffee shop), will not sit with back to the door
- Visibly aroused (behavioural observation)
- Will likely insist on driving rather being a passenger

Broadly conceptualised as 'anxiety' from a clinical perspective:

- Strong somatic symptoms (neck pain, head aches)
- Sometimes with interoceptive awareness (e.g. HR)
- Pertinent to avoidance (avoid the anxiety)
- Pertinent to sleep related issues

Maintaining factors

- Untreated psychological disorders
- Addictive behaviours
- Over-involvement and/or avoidance
- Further trauma/severe stressors (police, rescue, paramedics)
- Loss of home, and potential relocation to another region
- Loss of usual role and employment
- Financial and business losses
- Loss of community
- Physical injuries, chronic pain, disability
- Legal issues

Therapy: Model of care

- Long term engagement required (12-months +)
- Initial work often not focused on the trauma (D&A, relationships, other)
- Who will pay for this, who can provide services?
- Multidisciplinary model applies: psychiatry, psychology, GP, drug & alcohol
- Group and individual models
- Imaginal exposure, Cognitive Processing Therapy, psychosocial factors

Barriers to help-seeking and treatment availability

- Stigma, differing cultural beliefs
- Lack of awareness of symptoms (as a trauma response)
- Lack of services and suitably qualified clinical personnel
- Cost of engaging in treatment
- Well-intentioned but ineffective treatments being offered

Summary and main points

- Natural disasters impose a substantial burden of trauma related mental health conditions in survivors
- We need to learn more about early predictors of mental health issues (especially for natural disasters)
- Rescue personnel are often ignored in context of trauma exposure
- Numerous psychosocial stressors can endure for years
- Resources and funding typically decline over time
- Symptoms can emerge several years post event

