NSW Health
Disaster Mental Health

Handbook 5 - Specialised Assessment and Treatment

for Post-disaster Psychiatric Morbidity:

Level 3 Interventions

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Mental Health Implications: the full content of this Handbook is mental health specific.

People may present or be referred for specialised care for a variety of reasons. Their problems may have arisen directly and obviously as a consequence of their experience in the emergency, for instance as a result of threat to their lives; or subsequently in relation to deaths of loved ones, other losses, disruptions and the ongoing stressors of the aftermath. They may have a history of prior mental health problems, which are not uncommon, affecting one in five of the population, as numerous epidemiological studies demonstrate. The mental health issues for which assessment and treatment are sought, may relate to these vulnerabilities, or may arise as new onset psychiatric conditions. For the most part referral results from assessment, by the self or others, that the person has significant problems. These are likely to relate to the severity of symptoms, and their impact on wellbeing and functioning – for instance nightmares and sleep difficulties; hopelessness and despair; lack of concentration; and many other problems. Whatever the pathways to professional mental health care, people will need assessment that is clinically focused and takes into account the relevant issues – for instance prior history, symptoms and signs, mental state, and disaster experience, both acutely and subsequently, including risk and protective factors. Any formulation addressing problems presented needs to be attuned to the complexity of human experiences in such settings, and their implications for mental health. Treatments proposed need to be negotiated with those affected, and be informed by the available evidence and appropriate clinical practice standards. The provision of such interventions will need to be also informed by developmental aspects, culture and language, and resources available for care. Providers of individual clinical programs may need to be supported by other resources and personnel, either through structures and systems of care available, for instance for supervision, as well as the capacity to access other components of intervention such as rehabilitation programs. There are the challenges of providing for acute need, as well as the longer term, and continuing service responsibilities that existed pre

disaster, i.e. for the surge and sustainability of programs implemented to assist disaster recovery. Positive, hopeful strategies and ongoing support for the strengths and resilience of those affected by disaster are critical aspects of care.

Aims

1. To describe the rationale for specialised mental health interventions post disaster.
2. To provide **guidance for clinical assessment** of need for specialised mental health intervention post-disaster
3. **To identify a range of intervention options** targeted to assessed needs and based on, or informed by, research studies, evidence and clinical practice guidelines
4. To **identify research and evaluation frameworks that can assist the translation** of research into practice in the post-disaster context, so as to optimise care provision

1. Rationale

a) Psychiatric Morbidity Post Disaster

Although it has been established that most survivors of disaster return to a pre-event level of functioning (Bonnano 2004; Bonanno et al 2010**,** Galea and Maxwell 2009), for a small but significant percentage this is not the case. The trauma model has been most extensively studied and it has often been assumed that traumatic pathologies, such as Acute Stress Disaster (ASD) and/or Post Traumatic Stress Disorder (PTSD), are the likely outcomes for survivors of traumatic events, and for some time PTSD has been the 'signature diagnosis' in the outcome literature (North, 2009). Acute Stress Disorder/PTSD may be just one of a number of outcome syndromes. Recently there has been a much greater focus on other prevalent conditions; particularly mood disorders such as major depression, anxiety and substance abuse disorders. An awareness of the significance of grief and bereavement syndromes is increasing including research on traumatic or complicated grief syndromes (including with children) as they relate to trauma and grief post disaster (Brown, 2005). Complex syndromes of anxiety, depression may be comorbid with traumatic syndromes, and trauma and grief reactions may co-occur, as may complicated/prolonged grief and PTSD (Raphael et al 2011, in press). The relationships between these can be complex and may

relate to pre-existing individual variables and risk factors; the nature of the disaster experience; and other concurrent or subsequent vulnerabilities, stressors, or on the other hand factors assisting positive adaptation. Complex mental health presentations like these require high-level psychiatric assessment and management.

Issues of diagnosis are important and clinicians need to consider the spectrum of symptoms to the level of disorder; when to intervene; and to be aware of levels of risk with different disorder and stressor exposures. Knowledge of potential screening strategies; appropriate clinical assessment; and measurement, documentation and management options, is critical.

The generally accepted typology of disasters divides disaster agents into: 1) natural disasters (e.g. bushfires, floods, cyclones, earthquakes etc.); 2) human-caused disasters such as technological incidents (e.g. structural collapse, explosions involving human error, transport incidents, etc); and 3) terrorist acts which are deliberate and malevolent acts of violence (mass murders, domestic or international terrorism), (North, 2007). Terrorist acts can include acts using CBRN (ie. use of chemical, biological, radiological, or nuclear agents, i.e. 'Weapons of Mass Destruction'). Agro-terrorism (agriculture), and cyber terrorism are other forms.

When considering mental health outcomes of disaster it is essential that researchers and clinicians shape the response to the populations affected, their exposures to the various stressors associated with their disaster experiences; and the needs of the individuals who are most severely impacted and most vulnerable. Psychiatric sequelae, it is agreed "may differ from one individual to the next, from disaster to disaster and from population to population" (North 2007, p.32).

Considering the many methodological approaches to the measurement of exposures and outcomes (eg. type and severity of the disaster, level and nature of exposures, the types of outcomes measured and the instruments used), a wide range of outcomes has been documented in disaster studies (e.g. Neria, et al, 2009). In most instances, the experience of terrorism or mass disaster is sudden and horrifying. Survivors may be dealing with traumatic experiences and accompanying grief/loss (Norris and Wind, 2009), making the likelihood of both trauma and grief related morbidities more probable. Research studies report significant prevalence of Post Traumatic Stress Disorder, mood disorders such as Major Depression, and Anxiety disorders including Generalised Anxiety Disorder, Panic Disorder and Phobias, as

discussed below and more recently Prolonged or Complicated Grief. "Traumatic Grief" also occurs (see Chapter 13).

b) Acute Stress Disorder and Post Traumatic Stress Disorder

As discussed, PTSD is the 'signature diagnosis' of disaster, and the bulk of research and particularly intervention studies focus on it.

There is ongoing discussion around the diagnostic criteria for these trauma syndromes and additionally their nature and form in disaster settings (see Suvak et al 2008, McFarlane et al 2009). Although the degree and nature of exposure is significant, i.e. life threat, research has found that learning of the death of a loved one or witnessing an event repeatedly via the media may in some instances be the stimulus for the development of PTSD (Pfefferbaum et al, 2001).

Rates of these disorders will be strongly influenced by the severity of the incident, the degree of life threatening experience, deaths, destruction and extent of other stressor exposures. For Acute Stress Disorder and Post Traumatic Stress Disorder the strongest association is with exposure to personal life threat – the person though they would/could die, and experienced a "racing heart" with this (see Appendix A).

For people who become symptomatic for greater than 2 days and less than one month after a traumatic event, before a diagnosis of PTSD can be established, the diagnosis of Acute Stress Disorder (ASD) may be applied (See Appendix A, diagnostic criteria, DSM-IV-TR). After four weeks, a diagnosis of PTSD should be considered (DSM-IV-TR). It must be noted, however that new diagnostic criteria are being considered for DSMV & ICD II.

For Diagnostic criteria for common mental disorders see the brief outline Appendix A; also DSM-IV-TR.

c) Depression Post Disaster

These have been thoroughly reviewed in the post-disaster/terrorism context by Maguen et al (2009). This appraisal reexamines the prevalence and precipitants of depression and its course; it's relationship to loss; and to other disaster complications such as PTSD and Prolonged Grief Disorder, i.e. many of the comorbidity patterns that are frequent in post disaster contexts.

Depression tends to be a more prolonged consequence of disaster and not to settle, particularly if there has been disruption and dislocation of affected populations. Reported rates vary post-disaster, sometimes because of different durations, measures and other variables. Maguen et al (2009) in their comprehensive and valuable review examined correlates of these two disorders, in terms of pre-event, peri-event and post-event variables. This review of multiple studies across different disasters, found that post-disaster depression was frequently linked to pre-disaster depression, i.e. an exacerbation of this. Pre-event trauma, loss or other stressors could also heighten risk. For instance, these stress levels before 9/11 were found to be associated with greater risk of depression subsequently (Person et al, 2006). This might also be predicted by low pre-incident social support, and low socio-economic status. Being young, being old, or being female, were further predictors. With respect to the event itself, as with trauma syndromes, severity, intensity and proximity of exposures, and "panic"-type experiences at the time, could also predict depression. The loss of a loved one in the disaster is not discussed in this regard, but multiple losses post-disaster were found to be predictive – for instance, broadly in terms of the loss / conservation of resources model, and specifically, loss of home, property damage, loss of livelihood, dislocation, were all found to be strongly associated with depression. Loss of social support, or lack of "perceived helpful social support", family support or other, were predictive of depression, and when such support was present, it was to a degree protective. Support may be available initially, but later may be less so. However, mutual support mobilised by those working together for recovery, being joined "by shared experience", may be a positive and protective influence. As discussed by Maguen et al, physical health may also be affected. Ongoing or new stressors in the aftermath may add to vulnerability. These authors highlight the fact that for PTSD symptoms, pre-event demographics and peri-event experiences were the most significant factors. However they suggest that for depression post-event predictors such as additional or continuing stressor experiences and poor resource availability were more likely to be important.   It should also be noted, that as with PTSD, severity of exposure in the disaster, being more directly affected, is associated with heightened risk. For reference details for current criteria for Major Depression and other depression syndromes see Appendix A.

In their discussion of treatments for depression post-disaster, Maguen et al (2009) reported on the usefulness of Interpersonal Psychotherapy (IPT), with its interpersonal focus, and also

noted the need for further studies of both CBT and IPT in the treatment of depression specifically, not just when depression was comorbid to PTSD. Clearly treatment of depression in this context should be informed by guidelines and protocols using available scientific evidence and developed through agreed processes, such as the National Institute for Clinical Excellence (NICE) guidelines from the UK (http://guidance.nice.org.uk/) and the National Health & Medical Research Council (NHMRC) approved guidelines in Australia (http://www.nhmrc.gov.au/guidelines). Here as elsewhere the disaster experience, context and consequences need to be taken into account in clinical assessment and management.

d) Prolonged Grief Disorder

Prolonged Grief Disorder is a syndrome of chronic grieving, with difficulties accepting the loss and ongoing profound yearning for the one who has died, plus potentially feeling emotionally numb; inability to accept the death or feelings that life is meaningless without the person; feelings of mistrust; bitterness over the loss; identity confusion; avoidance of the reality of the loss; difficulties accepting the loss; difficulty moving on with life (Prigerson et al, 2009). These symptoms must last, it was proposed, 12 months or more, at high levels, and be associated with functional impairment. This has been proposed for DSM-V and with potential to be included. It is to be distinguished from "traumatic grief" as discussed below and in Chapter 13 (see also Raphael et al 2011, in press).

With respect to Prolonged Grief Disorder, Maguen et al quote the findings from Neria et al's (2007) post 9/11 study. This study found that being older, not employed, and losing a son or daughter (compared to a spouse or sibling), were associated with greater vulnerability. Being at the World Trade Centre also increased risk (2X).

In terms of the treatment of Prolonged Grief, Shear et al's (2005) model of exposure, cognitive restructuring, some IPT components, and a process for reviewing positive memories of the deceased, demonstrated significant improvements compared to IPT alone. Boelen et al's (2007) research also demonstrated the value of exposure therapy compared to cognitive restructuring alone, or supportive counselling. Reynolds et al (1999) addressed bereavement-related depression in a trial that demonstrated the benefits of IPT and nortriptyline as the most effective. Clearly as indicated here and through the findings of other researchers, further research is needed to develop care models for those experiencing such complex patterns of psychopathology in the post-disaster context. (These bereavement related treatment programs are discussed in detail in Chapter 13).

Bereavement, Depression and Prolonged Grief Disaster

The following considerations arise from the key question – is grief a disease, or can it lead to a disease or be associated with a disease. The loss of a loved one may contribute to, precipitate, or lead to an exacerbation of depression. As indicated previously, Prolonged Grief is distinct from depression and relates to the attachment of the bereaved to the deceased, and an ongoing yearning for the lost person, preoccupation with them and other features. Clinically it is important to recognise that a range of reactions and/or disorders may occur in the complex post disaster context. Those involved in assessment and management need to take into account the range of reactive processes and symptom constellations, the degree to which they affect functioning, cause clinically significant distress, or reach the level of diagnostic criteria. These observations can be important on decisions for management. A careful approach may require sequential, multifocal elements in the intervention program, with priority focus for those syndromes most directly interfering with functions.

e) Other Disorders: Anxiety syndromes, Substance Disorders etc.

A number of anxiety disorders has been reported as a consequence of disaster experiences, including Generalised Anxiety Disorder, Social Phobia, and Panic Disorder. Substance use problems and disorders have also increased in some affected persons. Assessment should encompass these and provide appropriate management in line with Clinical Practice Guidelines that must meet research standards, for instance NHMRC, NICE (National Institute of Clinical Excellence, UK). It should be noted however that these disorders in the post disaster context may represent exacerbations of existing vulnerabilities, be comorbid with other psychiatric or medical conditions, or be more transient for some.

2. Assessment

As noted in Chapter 11 on Level 2 Intervention programs, there is extensive evidence of the mental health problems that may arise in various forms post-disaster.

It may initially be unclear as to the degree to which people are affected because there is likely to be a spectrum of symptoms of distress, anxiety and unhappiness as well as general health complaints in the post disaster milieu. This is the more so when there is ongoing social disruption, and mass damage and destruction, but also when people are struggling to come to terms with what has happened, with death, loss, and uncertainty. Interventions may not be able to clearly delineated at different levels, or in terms of earlier or later interventions. Assessment, on which to base interventions, needs to be cognisant of this spectrum of effects, to determine the need for generic and more specialised services. Many programs currently proposed are described in terms of Trauma-focused Cognitive Behaviour Therapy for PTSD with a strong emphasis on exposure, and more recently, related models for Complicated or Prolonged Grief. Treatments for common mental disorders such as depression and anxiety disorders arising post disaster are also relevant. Intervention programs increasingly recognise the importance of resilience and may suggest a component of therapy that focuses on strengths or enhancing resilience alongside treating pathology (Kent et al, 2011).   There is to date no disaster related research that forms a scientific basis for this component of intervention, i.e. tertiary, specialised treatment programs, apart from evidence for treatment of these disorders based on research from non-disaster settings.

Some of the studies of relevance to treatment will be discussed below, but further issues also arise about:

- Education and training of mental health professionals to deliver such specialised treatments.

- Dissemination to professionals of the best available evidence of what is effective for the disorder/s and the post disaster contexts.

- Strategies for responding to identified mental health needs and adopting and utilising approaches targeted to the specific disaster and individual clinical presentations.

- Addressing the complexities of human psychopathology and taking this into account, including the effects of preexisting vulnerabilities, strengths, the disaster experience and potential time trajectories of recovery or increasing pathology.

- Building a knowledge base of what has been seen to be <u>effective in real world post-disaster contexts</u> of service delivery, at both system and individual clinical provider levels.

- Contributing to the development of research and evaluation frameworks.

a) Assessment of need at Population levels

This may be carried out using a range of systematic assessments and epidemiological frameworks. These programs, as discussed for instance by Kessler et al (2008), in the post-Hurricane Katrina context, indicate both the difficulties with dispersed populations, and the importance of community engagement in supporting such endeavours. Galea and Maxwell (2009) provide a valuable overview of these challenges, and the need, ideally, for pre- and post-design when possible, and the range of methodological issues that need to be addressed. When the levels and nature of mental health problems are identified, how care / interventions may be provided for those so affected, is a further issue. Such data, when available, provides a basis for intervention, service planning and implementation, with the aim of mitigating the severity, extent and prevalence of post disaster psychiatric morbidity. Such survey processes for example by CATI (Computer Assisted Telephone Interview) or other systematic surveillance models can assess representative samples of the population, providing information for population based strategies, and clearer focus for clinical intervention planning and programs.

b) Assessment of need at Clinical levels

There are considerations such as possible screening, with associated ethical implications, i.e. are resources available to provide for the problems, if these are identified. There is also the issue, as described in Wessely et al's (2008) paper on psychoeducation, indicating that presentations of symptom lists may encourage pathologising of normal reactive processes. Nevertheless if screening also includes strengths and positive adaptations, it could be of value. It may be considered, if adequate services can be provided, as described by Brewin et al (2008), in their Screen and Treat approach, with a filtering process for referral of those with significant post disaster morbidity for management through a specialised trauma service. Stepped care models as described by Zatzick (2007) can also be considered.

Clinical Assessment

This needs to encompass routine clinical assessment strategies, plus assessment of the influence of the disaster related experiences, and other contexts. It needs to cover, for instance:

- <u>History of the current problems</u>, their onset, nature and evolution.
- <u>Current health and social issues</u> should be assessed.
- <u>Prior history</u> including past mental health, health and social problems; past losses and adversities and adaptations to these, coping styles, including those that are positive, and may indicate potential for resilience.
- <u>Disaster context</u>, experiences prior to the emergency, during the acute phase and since exposure to the disaster stressors, perceived practical and emotional support and other issues, for instance:
  - Preparedness or warning (if relevant)
  - Life threat experience – (personal experience or threat to loved ones), exposure to multiple deaths of others and reactions, e.g. heart racing
  - Injury or other effects
  - Losses and bereavements of family members or close persons
  - Broad losses – home, community, school, work, resources, etc.
  - Dislocation from home, community, work place, networks etc
  - Perceptions of experience in the emergency and subsequently, including specifically how the person perceives support that they were offered
  - Perceived effects on functioning, wellbeing, future orientation, and achievement, to address possible disaster impacts on these to date.
  - Post disaster stressors – consequent, coincidental, concurrent etc.
  - Assessment for specific syndromes and the degree to which they affect functioning including, but not limited to, PTSD, Depression, Anxiety Disorders, Substance Abuse, and other mental health disorders, as per current diagnostic criteria. These should be considered in terms of possible precipitation by the disaster, or related to earlier pathologies.
  - Assessment of more general nature e.g. Somatisation problems, health behaviour changes, relationship effects, and so forth
- <u>Assessment for positive capacities</u> and processes is also a key aspect. These range from coping strategies, other adaptive processes and resilience through to Post-Traumatic Growth.
- <u>Assessment of environmental context</u> e.g. workplace, home, community, finance is a further important area influencing disaster mental health.

- Assessment of Risk is an essential component, i.e. risk of

   - harm to others, (such as family, violence)

   - harm to self, suicide thoughts and intent

- Functional consequences are key issues, as any intervention should aim, as far as is possible, to return the person to effective functioning in all life spheres. Functioning in relationships, work, education and other areas of life should be assessed, to provide a basis for specific interventions related to functional difficulties, should such programs be required. As a baseline tools such as GAF (Global Assessment of Function, DSM-IV) can provide important data.

- Mental State Assessment: this is a critical component of any clinical assessment. The need for early mental state examination may become obvious as the person is engaged for the clinical processes, for instance intense distress making it difficult to progress; confusion, preoccupation to the exclusion of current issues, cognitive difficulties, behaviour.   The mental state examination in the post-disaster context should also examine the generally assessed domains of:

   - Overview of appearance, behaviour, speech, attitude

   - Mood and affect, arousal

   - Cognition – content and form of thought; consciousness, confusion (considering indicators of possible organic effects, exploring orientation, concentration etc, and awareness to current context)

   Whether assessment utilises the usual clinical processes or builds on systematic measures will depend on resources available, time, and people's willingness to engage in any such complex process. Many people are reluctant to seek formal mental health care, and may be more so if there is prolonged, detailed assessment. Nevertheless some measures in routine care could help provide more systematic data to complement clinical assessment. Galea and Maxwell (2009) emphasise the difficulties of using consistent measures of disaster exposures, and suggest that "exposure to particular disasters is likely to be unique and must be considered in a disaster-by-disaster basis" (p.587). Assessment of children, adolescents and adults may require an understanding not only of that person, but also of family response and functioning. For children, developmental issues, parental and family context, school settings and functioning, in social, learning, or emotional contexts, as well as other

environmental factors, may all influence the nature of presentation and the capacity to recover positively or to experience more negative outcomes.

- Specific careful assessment of those with pre-existing psychiatric disorders is recommended, including a review of symptoms, functioning, and experience of the disaster. Ongoing treatments may have been disrupted, new issues have arisen or even unanticipated improvements. Relevant clinic interventions should continue, or even change some elements of treatment and look for opportunities of support those affected to more resilient outcomes.

c) Formulation of problems, function, needs, strengths, diagnoses and appropriate potential interventions

This is a key clinical skill and should be the basis of negotiated processes with the person concerned. This establishes the rationale and basis for intervention, the potential diagnoses, comorbidities, persisting conditions, diagnostic factors, functioning, strengths, the nature of proposed treatments, and the respective roles of the therapist and client / patient / affected person. Individual and/or family, and group strategies may be required.

- Interventions for people with significant disaster related morbidity (i.e. Level 3 programs) should be an identified component of the recovery program, and ideally provided through a specialised trauma or disaster program or team. It is critical that a senior psychiatrist provides leadership and/or consultancy in such a team, because of the strong correlation of mental health with physical health problems; the role of medication in management for some of those affected; the vulnerabilities associated with pre-existing mental illnesses; and the complex components of assessment and management that are likely to be required over time.

Providers of intervention at this level should be suitably trained, qualified and credentialed mental health professionals. They may be psychiatrists, clinical psychologists, social workers, or occupational therapists who have been trained in assessment and treatment strategies to the level of such skills. Programs may be provided following assessment and referral by the General Practitioner, as with Better Outcomes or Access to Allied Psychological Services (ATAPS) programs. Such professionals should have access to regular clinical supervision, and psychiatric consultancy advice if requested. Clinicians in private practice with required skills, or specialised trauma units or programs, may also provide these interventions. Ideally such

post disaster high-level programs should be linked into a team, and be a significant component of formal recovery programs.

All professionals providing such care should be required to keep appropriate <u>clinical records</u> and meet requirements for their clinical governance and reporting systems; or similar requirements in line with private clinical practice. Psychiatrists with necessary clinical expertise in this area are important providers, particularly in terms of the clinical complexity of many such presentations, and the fact that treatment may require both psychotherapeutic and psychopharmacological components to optimise outcomes. They too should utilise professional standards for access to peer review, supervision and consultancy advice, as well as appropriate documentation.

d) Interventions: Negotiations for provision of specialised care

Following assessment, the clinician discusses with the person who has presented, the outcome of what he/she sees to be the key problems to be dealt with and, what "interventions" or treatments may be helpful. This process extends from the assessment through to a discussion with the person of options or choices about potential care. Persuading those who may present for assessment to engage in, or "stay with" treatment offered over time, may be difficult. This is particularly so if there are treatment programs requiring many sessions or even months of treatment, which may be very difficult in the post-disaster context. Costs of care offered may also be a concern, or, a barrier in some instances. Other priorities may be overwhelming such as family needs, home and work demands. Shaping intervention programs flexibly is a core clinical requirement, particularly in terms of "manualised" treatment strategies, the nature of the evidence base and the fact that in the disaster context, intervention programs are usually evidence informed.

Those affected may not see themselves as patients, clients, or as people in need of mental health care, particularly in the acute or sub-acute stages of the disaster. They may only see themselves as having minor "problems". Clinicians will need to be careful that they do not presume pathology, or diagnosis, or prematurely label, particularly with someone who has never previously acknowledged mental health issues. The engagement process between clinicians, and those whom they would seek to help, needs to progress sensitively in the post-disaster context, taking into account "ordinary people" dealing with "extraordinary experiences". Nevertheless an important aspect of the clinician's work is outlining the

potential for interventions offered to assist with distress, symptoms, suffering and functional difficulties, and as well the range of sources of help, such as online programs, other clinical options, or access to care at a later time. It is also clinically and ethically necessary to discuss any risks involved, and support provided should need arise.

3. Specialised Interventions and Treatments Post Disaster

a) Management of Acute Stress Disorder and Post Traumatic Stress Disorder

As noted above the main theme of treatments post-disaster has been PTSD. There have been few trials in the post-disaster settings, at least for adults, so the scientific literature is chiefly based on non-disaster clinical trials for PTSD, depression where this is considered; and more recently, Complicated Grief or Prolonged Grief (Disorder). Treatment is usually informed by randomised controlled trials (RCTs) from other settings.

In a recent review Bryant and Litz (2009) discuss the timing of interventions, with the early stages focusing on Psychological First Aid rather than psychological debriefing because of the potential problems with the latter; then intermediate interventions such as Cognitive Behaviour Therapy with prolonged trauma exposure components. As these authors note, there is a need to build the evidence base for the usefulness of such techniques in the post-disaster context, either as early interventions or specific treatments for PTSD. They also note that Basoglu's group (Basoglu et al, 2007) had demonstrated that a single-session CBT intervention was effective and decreased PTSD, through teaching people techniques of self-exposure, with respect to situations that triggered fear. This intervention also emphasised self-comforting. It was however delivered some years after the disaster studied (an earthquake). Bryant and Litz go on to discuss "early intervention" as a more 'intermediate' intervention. They focus on possible predictors of heightened risk of PTSD that might be targets for early intervention, for instance the presence of Acute Stress Disorder in the first month, or the severity of PTSD symptoms in the period following exposure to the traumatically stressful experience. Bryant's group has carried out studies with trauma survivors who were diagnosed with Acute Stress Disorder, testing five sessions of prolonged exposure, cognitive therapy; anxiety management; and supportive counselling. They found significantly lower levels of PTSD in both exposure / cognitive therapy groups (20%) compared to 67% in the supportive counselling group. They also found that that this

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beneficial outcome for the five therapy sessions was maintained to a 4-year follow-up (Bryant et al 1998, Bryant et al 2003). However, as with all such studies to date, these were not carried out with post-disaster populations.

A further useful model is that reported by Shalev et al (2011) who demonstrated the benefit of early intervention with prolonged exposure therapy (12 sessions) compared to other interventions of routine care.

b) Management of other Disorders

There is also the need for specific treatments for major diagnosed disorders such as Depression, Complicated Grief, and other conditions. Reviews of interventions for Complicated Grief, such as those of Shear et al (2005) have examined the effectiveness of CBT involving: grief-focused imaginal exposure (of death scenes); "communicating" unresolved issues "to the deceased"; activity programs; and strategies for tolerating distress. This type of intervention was found to be more effective than interpersonal psychotherapy and has been further supported by trials such as those of Boelen et al (2007).

The management of ongoing stressors, ongoing threat has also to be considered as suggested by Marshall et al (2007). Opportunities for intervention after mass violence with web-based approaches (Litz et al 2004, Litz et al 2007) such as internet interventions for trauma (see also previous chapter), as well as similar programs for Complicated Grief (Wagner et al, 2006) and depression (Christensen et al, 2006) offer important additional treatment resources that people may find more useful, particularly as they can be accessed in a person's own time.

As noted previously Difede and Cukor (2009), in their review of long-term treatments for adults, discussed the limitations of the evidence base in the disaster context; the importance of addressing not just PTSD but also depression and substance abuse problems; the interpersonal effects of disaster; and the difficulties of dissemination and implementation.

Other reviews have also considered the challenges of defining and researching interventions after disasters or other mass trauma, particularly in view of the growing evidence of a range of variable reactive trajectories after exposures to traumatic stressors, loss or other adversities (Watson, 2007). Watson's review dealt with theoretical models of trauma processing, and how these may also be influenced by pre-trauma vulnerabilities and

strengths; the importance of attaining "safety"; the role of self-efficacy, optimism; and the importance of resources such as social support. She also reviewed the lack of evidence to support critical incident stress debriefing, noting that it was not established as an effective intervention. Importantly, as in other reviews, she highlights the established connection in a number of studies, between increased heart rate in the acute phase and increased risk of post trauma PTSD (Shalev et al, 1998, Zatzick et al, 2005).

Building on the range of studies in non-disaster trauma situations Watson also highlights the effectiveness of CBT and exposure focused interventions, 4-5 sessions as early intervention. Importantly, while it is recognised that these strategies can be effective, Watson, using a consensus process with colleagues, recommended that these structured cognitive behavioural interventions are "not to be implemented until secondary stressors in the environment are under sufficient control to allow the individual to focus on the intervention" (Watson, 2007, p.128). Several of post-disaster reports suggest that participants found the most useful aspects of a multifaceted post-disaster program were those aimed at "providing direction to help communities heal and helping the communities come together to handle the crisis" (p.128).

As indicated by a range of disaster mental health leaders (e.g. NIMH report on Mental Health and Mass Violence (http://www.nimh.nih.gov/health/publications/massviolence.pdf) the factors that need to be assessed in the acute phase include: basic needs; immediate risk to life; functional impairments / capacities; strengths, resources including social support; information availability; affected persons views of needs, current and future, for recovery. Psychological First Aid, following the meeting of basic needs and triage if required, is also described in terms of psychological interventions for: engagement; safety and orientation; stabilisation and self regulation; and connectedness. These also include: triage and screening; restoration of functioning; coping and self-regulation; problem solving; risk reduction; resilience and recovery. These and other early interventions aim to triage and set the stage for more intensive and specialised treatments for those who are assessed as likely to require them, either as an emergency response if very severe, or more usually over the months that follow. The generic interventions such as Skills for Psychological Recovery may contribute to early intervention but also to identifying those with more severe and complex mental health needs.

Benedek (2007) provides a comprehensive review of interventions for Acute Stress Disorder and PTSD in the disaster environment, highlighting risk factors, but the resilience of most. Severity of exposure, lack of social support, and personal and family vulnerabilities may all contribute. Benedek also reviewed the neurobiology of the trauma syndromes. In discussing assessment he identified themes similar to those noted above, including history and nature of "trauma exposures"; the diagnostic criteria for ASD and PTSD; but also the importance of extending assessment to include possible / probable co-morbid conditions such as major depression, other anxiety disorders and substance use disorders. While emphasising the "gold standard" of the clinical interview, he also listed a number of useful measures, both clinician-administered and self-reported, which can assist the diagnostic process. These are listed below and information can be sourced as follows:

1. The Structured Clinical Interview for DSM IV (SCID-IV) available at
   http://www.scid4.org/
2. The Clinician-administered PTSD Scale (CAPS) – see
   http://www.ptsd.va.gov/professional/articles/article-pdf/id12317.pdf
3. The Davidson Trauma Scale (DTS) -
   http://www.mhs.com/product.aspx?gr=cli&id=overview&prod=dts
4. The PTSD Symptom Scale Interview (PSSI) -
   http://www.ptsd.va.gov/professional/pages/assessments/pss-i.asp
5. The PTSD Symptom Scale Self-report (PSS-SR) -
   http://www.psymed.info/default.aspx?m=Test&id=48&l=3
6. The Impact of Event Scale - Revised (IES-R) - www.serene.me.uk/tests/ies-r.pdf
7. Acute Stress Disorder Interview (ASDI) -
   http://www.istss.org/AcuteStressDisorderStructuredInterviewASDI.htm
8. Acute Stress Disorder Scale (ASDS) -
   http://www.psych.on.ca/files/nonmembers/AcuteStressDisorderScale_DRN_March
   _5_2010.pdf

In discussing treatment and intervention programs, Benedek notes the availability, but limitations of many of the practice guidelines, both in the focus of their formulation, the unlikelihood of publication of negative results, plus the lack of population-based studies. Their practical and clinical applicability in the post-disaster setting is a further issue.

c) Pharmacotherapy

Pharmacotherapy and its role for post-disaster mental health problems is also reviewed by Benedek (2007) who notes the attempts to prevent PTSD, by the use acutely after trauma exposure, of beta-blocking agents such as propanonol. The aim would be to disrupt certain neurophysiological processes, the nor-adrenergic mechanisms that contribute to the consolidation of fear learning and memory. While these studies have reported some reduction of physiological processes and symptoms, they have not been found to prevent PTSD. With regard to treatments, of established disorders, Selective Serotonin Re-uptake Inhibitors (SSRIs) have been found to be the most effective in reducing all three PTSD clusters of symptoms, i.e. re-experiencing, avoidance and arousal, but are not uniformly effective Shalev et al (2011). Other antidepressants have also been used, but with a lesser evidence base, as have some second generation antipsychotics. The use of benzodiazepines is not recommended, although they maybe occasionally used briefly for sleep difficulties.

As noted regarding general Level 2 interventions, both broadly-based and specialised intervention strategies for trauma syndromes and other post-disaster morbidity may be required. An example of this is Brewin's "screen, filter, treat" model, for affected populations (Brewin et al, 2008), and Zatzick's Stepped Care approach for those injured and with associated traumatic experiences (Zatzick, 2007). This is also discussed by Rundell (2007) for medical and surgical disaster casualties. These programs link to more specialised services (Level 3) as required.

Bisson et al (2010) in their "TENTS" Guidelines, report on a consensus process through a three round web-based Delphi process, involving 106 experts. They aimed to "develop evidence-informed post disaster psychosocial management guidelines" (p. 69).

These research consensus processes recommended that there should be multiagency psychosocial care planning groups in areas and that these would provide general support (social, psychological and physical) and psychological first aid, as relevant to Levels 1 and 2 programs. They specifically considered that specialised mental health intervention should only be provided when systematic assessment indicated need, i.e. specific, specialised intervention such as trauma focused CBT, pharmacotherapy and the like should only be

provided when assessment indicated need for these, potentially with a stepped care approach.

d) Management of other psychiatric morbidity or common mental health consequences

This is often assumed to take place in terms of existing evidence-based clinical practice guidelines addressing these conditions, and their adaptation for post-disaster implementation. There is little data concerning their effectiveness in such circumstances. Psychological therapy, CBT, particularly when trauma focused, is a central strategy, as much of the research that has been carried out has this focus. In this vein, the Australian Centre for Posttraumatic Mental Health developed a set of resources, training guidelines, for response to the mental health consequences of the Victorian (Australia) bushfires of 2009. The key themes of this resource are discussed below. This Centre has also been responsible for the development of the Australian (NHMRC) guidelines for the management of PTSD generally, which will be updated in 2012. The ACPMH provides training programs for these resource strategies.

http://www.acpmh.unimelb.edu.au/services/education.html

Appendix A is a reference list for diagnostic criteria for common mental disorders.

A list of evidence-based guidelines for major psychiatric disorders is provided in Appendix B.

Appendix C lists a number of excellent books and resources that discuss these issues in depth. It should also be noted that this is a constantly developing field and new research findings are constantly emerging.

Appendix D is a practical section from the resource developed by NSW Health, the NSW Mental Health Training Manual, attached for use as relevant. It is based on / informed by the evidence of the day.

The resource described below deals with a number of modules for management of post disaster psychiatric morbidity. It presumes clinical assessment as outlined above. People affected by disasters are usually referred to this level of specialised psychiatric care by other professionals whose roles, or level of knowledge and skills may not have been developed to the degree of expertise and complexity required, i.e. that represents specialised mental health services specifically tailored to post disaster needs. The training and guidance resource described below has been developed by the Australian Centre for Post Traumatic Mental Health, based on the available evidence, in response to the 2009 Victoria Bushfires, with the support of the Department of Health and Ageing.

4. Implementation of Intervention Programs

It should be understood that this resource is a useful grouping of relevant strategies but does not and should not replace essential clinical processes of assessment, diagnostic formulation, and client/patent focused intervention strategies. Rather it is a training resource with guidelines to be appropriately adapted to the specific needs of those affected and their circumstances.

Evaluation of effectiveness of these or other interventions provided is an important component of building knowledge about what is effective for disaster affected populations in the real world settings post disaster.

a) An evidence informed model for specialised intervention programs addressing the range of common mental health problems post disaster.

This model is called "Therapist Resource for the Psychological Treatment of Common Mental Health Problems for Adults affected by Trauma and Disaster" Forbes et al (ACPMH, 2009).

This resource, the authors make clear, is "to accompany a specialised training workshop for mental health professionals" and is not a stand-alone guide. It is focused to training Level 3, and a related resource is separately available for children (Cobham et al, ACPMH, 2009). The material is stated to be consistent with other national and international guidelines, the United Kingdom National Institute for Clinical Excellence's guidelines for the treatment of Depression, Panic and agoraphobia, Generalised Anxiety Disorder and PTSD (available from www.nice.org.uk/guidance/cg/published), and Australian guidelines for Acute Stress Disorder and Post Traumatic Stress Disorder, available from the Australian Centre for

Posttraumatic Mental Health (www.acpmh.unimelb.edu.au), and for depression and other disorders the Royal Australian & New Zealand College of Psychiatrists (http://www.ranzcp.org/).

It must be emphasised however that this guidance deals only with the psychological aspects of management and does not address the specialised psychiatric management that may be needed, including medication.

The developers of the resource note that "competency in clinical assessment" is a requirement. This should cover issues such as those raised above in assessment

The "stated goals" and objectives of the resource for Level 3 training are:

- "To alleviate survivor distress from mental health conditions in the aftermath of trauma and disaster" (p.2)

- "To promote positive outcomes and recovery from the impact of trauma and disaster" (p.2).

This is seen as being achieved through helping those affected "to manage distressing symptoms of conditions including PTSD, Depression, Anxiety and Complicated Grief "(p.2), as well as: managing intense arousal and emotional response; difficulties with relationships; activities and positive goals; and developing more adaptive thinking styles; through the knowledge and skills developed collaboratively in this program.

The modules of this Framing resource include the following:

1. Psychoeducation module (1 session) about post trauma mental health in its various forms, including: traumatic stress and PTSD; anxiety; panic; anger and extreme distress; depression; complicated grief; therapy, CBT; self-care.

2. Arousal module (2-6 sessions) which deals with anxiety and anger management and distress tolerance. This includes for instance, breathing strategies, relaxation, managing anxiety, distress, anger, emotions.

3. Behavioural Activation Module (1 session) including psychoeducation; planning, scheduling and activities, including increasing pleasant activities; and dealing with cycles of depression and reduced or negative activities.

4. Exposure module (2-6 or 10 sessions) – exposure to traumatic circumstance in vivo, or imaginally; and adjunctive cognitive therapy.

5. Cognitive Therapy module (4-8 sessions). This aims to reduce the distressing symptoms of the range of problems, with focus on the most distressing and

significant. It involves: psychoeducation on cognitive therapy; psychoeducation on therapy processes; and dealing with negative and problematic cognitions.

6. <u>Complicated Grief module</u> (4-6 sessions). This aims to help those bereaved to develop strategies to deal with the emotional and physical reactions to the death of a loved one, to accept this and move on with life, with more positive memories of the person. This includes psychoeducation; exposure to memories of the death; cognitive restructuring re: grief; and a range of other activities to deal with grief – which can include the person telling their grief stories. (These issues are dealt with in detail in the Bereavement Resource of the current series of papers (See Chapter 13, also (Raphael et al ,2011,).

7. <u>Relapse Prevention module</u>. This aims to enhance skills to prevent relapse of distress, problems, and includes summarising gains; saying "goodbye" to the therapist; summing up and managing future stress; as well as maintaining a "health balance" and identifying and planning for high risk situations.

It should also be noted that there is some debate about possibility of risk of increased <u>suicide</u> in the disaster aftermath, such possibilities should be assessed and managed, particularly if there is significant depression, despair, hopelessness, extensive loss, and ongoing chronic problems.

The related training resource "<u>Therapist Resource for the Psychological Treatment of</u> Common <u>Mental Health Problems in Children and Adolescents after Trauma and Disaster"</u> <u>Cobham et</u> <u>al (2009)</u> was developed in collaboration with the Australian Centre for Posttraumatic Mental Health. It provides modules that are similar but includes family and developmental themes. They are: Introduction to resource and principles; Parents and Parenting module; Psychoeducation module; Cognitive Therapy module; Arousal (Anxiety and Anger) Management and Distress Tolerance module; Exposure module; Reclaiming your Life – Behavioural Activation module; Applications of Exposure to Complicated Grief module; and Relapse Prevention module. These themes are addressed in detail in this resource.

b) Comorbid mental and physical health problems

It is critical that medical management of <u>health issues</u> more broadly is incorporated into the post disaster context. This requires consideration and management support (e.g. through

general practitioner and relevant specialist services). Issues of relevance include the following:

- Management of chronic illnesses, maintenance and dealing with any disruptions of care
- Impact of disaster/stressors on
  - Health behaviours including sleep, nutrition, exercise, smoking, drinking, substance use and potentially abuse
  - Functioning in work, education, relationships, recreation and other areas
  - Comorbidity associated with post disaster psychiatric disorder
- Need to assess physical effects of disaster on health, health fears and preoccupations, and new physical illnesses potentially related to the disaster experience.

These assessment and management programs reflect key responsibilities for mental health as well as the management of specific mental disorders in the aftermath of disaster. It is also necessary to facilitate such medical care and to collaborate with relevant providers to ensure all health concerns are appropriately managed.

c) Clinical Realities Post-Disaster and Other Considerations

The resources described above contribute a range of intervention processes that can be used in ways related to clinical assessment, current need and circumstances of the persons affected, as well as ongoing consequences of the disaster. Disasters involve disruption of people's lives, communities, institutions and wellbeing. The tasks of post disaster practical, social, and emotional recovery occur over prolonged periods and are, for the most part driven and determined by those affected and their communities. They take considerable human energy and commitment. Such activities, in which people take action themselves, often assist recovery. However they may leave little time or capacity to commit to psychological interventions.

Realities of culture, diversity, disaster context, need and readiness

Interventions at this level, here as elsewhere, need to take into account culture, language, disability and any other specific factors that may influence the person's ability and willingness to engage with treatment programs. Cultural issues may also involve belief systems, reverberate with past trauma if there is refugee status, and stigma or failure to

understand the relevance of mental health interventions offered. Culturally and linguistically appropriate information, resources and engagement strategies, including bilingual mental health workforce, need to be developed and readily available where needed (Marsella et al, 2010).

Watson (2007), Benedek (2007), and others note that the application of such post disaster programs will depend very much on the person's capacity to engage and commit to what often requires time, concentration, and repeat visits. These authors and others repeatedly indicate, the stressors of the disaster, other acute needs, long-term problems and the capacity to be psychologically and physically available for such interventions, must be taken into account in determining the appropriate clinical approach, and what can usefully be provided to assist the person when they are experiencing significant problems. It must also be recognised that practical assistance may be a key factor in improving people's outcomes and must be an integrated part of any assessment of need and response to this. It is thus increasingly important that research and development progresses effective, feasible and hopefully brief or stepped care interventions. These should include of course potential for single interventions such as Basoglu et al (2007) noted previously, and also population strategies, phone and web-based interventions as described. In addition, recognition of complex Trauma, multiple comorbidities, preexisting psychopathology or vulnerabilities, is important, as all may require in depth specialised treatments over time.

As Litz notes in his commentary on Early Intervention for Trauma (2008), "CBT" is multi-session, action oriented, emotionally demanding, and requires active and continual engagement" (p.505). Another systematic review and meta-analysis of studies where treatment had been carried out in the first 3 months found positively for CBT strategies, with greatest effects for programs delivered for Acute Stress Disorder or acute PTSD (Roberts et al, 2009). While early interventions appear to offer positive outcomes, as also suggested by Shalev et al's (2011) recent study, the demands of the early post disaster period may make this less likely, even if available.

Bisson (2008) describes the challenges in the disaster context, of more complex, as opposed to relatively simple PTSD following a single incident. Taking into account the frequency of traumatic experiences in childhood, including abuse and neglect, and the multiple stressors

associated with most disaster experiences, it is likely that many post-disaster trauma and loss impacts are more complex than initially understood or expected.

The complexity of trauma syndromes is increasingly recognised and will require more sophisticated assessment and management, usually beyond the models described above. The complexity of loss and grief and their relationship to depression has been further recognised in recent studies after terrorism and disaster, and will also need to be taken into account.

d) Internet based interventions

There are a number of Internet based interventions that provide "counselling" for PTSD, Complicated Grief, Anxiety disorders and Depression. These are generally modular, and with Cognitive Behavioural Therapy modules. The degree to which they are based on: systematic assessment; criteria based diagnosis; clinician developed interventions; numbers and types of modules to be completed; "psycho education"; and so forth, needs to be clearly established. They are however important resources and further research and development is vital. Who is able to access these, who completes them and for whom, and for which aspects of post disaster morbidity they are effective, need to be evaluated, as well as whether there are any negative consequences. Wagner et al (2006), Christensen et al (2006), have provided evidence-based programs for on-line treatment. However effectiveness of these and others for disaster affected populations needs further evaluation.

e) Mental Health Problems and Disorders Post-Disasters Assessment and Management Issues

As touched upon in the reviews and noted above there are many questions about the nature of psychopathology post-disaster: how much is a continuation or exacerbation of pre-disaster mental health issues; how much is actually psychopathology over time in terms of a trajectory of distress and dysfunction as compared to cross-sectional, criterion-based diagnoses; or a combination; or actually in a spectrum of normality / pathology dimensions. As discussed by Ursano et al (2009), mental health responders assist in many ways, providing support, information, practical assistance and "guidance and psychological and health-related information" (p.132). In addition they deal with "the range of emotional and

behavioral consequences" (p.132). Ursano et al also emphasise the need for "accurate and real-time health surveillance information". This is critical to providing care, and shaping and targeting mental health and health program contributions. Pre/post data is also helpful as it can make clear the extent of disaster effect, as with Hurricane Katrina where mental health problems were shown to have doubled 6 months after the disaster. Kessler et al (2009) Disasters can lead to profound and ongoing mental health and health consequences over years later. The nature of any pathological process is complex and requires an understanding of precipitants, impact on functioning, prognosis and factors perpetuating disease processes, and the neuroscientific, genetic and environmental influences that can contribute to these pathologies. Ultimately of course it is about mental health protection, and prevention, effective early intervention and treatment.

The understanding of disaster impacts has been helped by the growing body of epidemiological studies such as that of Galea et al (2004) addressing PTSD; Norris et al's (2002a, 2002b) and 2005 update of meta-analyses of disaster studies; (Neria et al (2008) review of PTSD following disaster, and other studies, including those that have looked at the patterns for children (e.g. Hoven et al 2009). However these have not as yet been clearly linked to the development of systematic response planning and interventions for those at highest risk, or most affected, and with greatest need. Nor has there been evidence of systematic studies of, and response targeting, the needs of those with pre-existing mental illness vulnerabilities. Planning for such needs, with expectancy of resilience and strategies to enhance this and self-care, as well as to provide for those with the greatest need, are critical development goals for specialised post-disaster intervention provision.

Any management needs to take into account syndromes beyond PTSD, Depression and other anxiety disorders, Substance Use disorder, and including health and social behavioural outcomes, somatisation disorders, exacerbation of psychotic or other illnesses, and general health consequences. Interventions also need to be able to address social impacts and functional impairments. At the same time, recognition of strengths, resilience and positive adaptive capacities, protective factors and other variables, needs to be taken into account to optimise post disaster outcomes. These all impact on individuals, family, work, society, security, culture, and the economic infrastructures of societies.

Conclusion

Despite extensive studies and intervention programs, there is, as yet, no substantial body of evidence on the effectiveness of the identified interventions in this post disaster setting. There is an urgent need for consistent measures, disaster relevant variable measures, pre and post data sets and a strong commitment to systematic evaluation studies over time, disasters, and settings (Kessler et al 2008, Galea & Maxwell, 2009).

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National Institute for Health and Clinical Excellence, United Kingdom.
http://www.nice.org.uk/

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Appendix

Appendix A – Diagnostic criteria for common mental disorders

Appendix B – **A reference list for evidence based guidelines**

Appendix C lists a number of excellent books and resources that discuss these issues in depth. It should also be noted that this is a constantly developing field and new research findings are constantly emerging.

Appendix D – this is a practical section from the resource developed by NSW Health, the NSW Mental Health Training Manual, attached for use as relevant. It is based on / informed by the evidence of the day.

Appendix A

Diagnostic criteria for common mental disorders can be accessed in **DSM-IV-TR**

Chapter 6. Mood Disorders

Major Depressive Disorder is characterised by one or more Major Depressive Episodes (i.e., at least 2 weeks of depressed mood or loss of interest accompanied by at least four additional symptoms of depression).

Chapter 7. Anxiety Disorders

Generalised Anxiety Disorder is characterised by at least 6 months of persistent and excessive anxiety and worry.

Specific Phobia is characterised by clinically significant anxiety provoked by exposure to a specific feared object or situation, often leading to avoidance behavior.

Social Phobia is characterised by clinically significant anxiety provoked by exposure to certain types of social or performance situations, often leading to avoidance behavior.

A Panic Attack is a discrete period in which there is the sudden onset of intense apprehension, fearfulness, or terror, often associated with feelings of impending doom. During these attacks, symptoms such as shortness of breath, palpitations, chest pain or discomfort, choking or smothering sensations, and fear of "going crazy" or losing control are present.

Acute Stress Disorder is characterised by symptoms similar to those of Posttraumatic Stress Disorder that occur immediately in the aftermath of an extremely traumatic event.

Posttraumatic Stress Disorder is characterised by the reexperiencing of an extremely traumatic event accompanied by symptoms of increased arousal and by avoidance of stimuli associated with the trauma.

Chapter 8. Somatoform Disorders

Somatisation Disorder (historically referred to as hysteria or Briquet's syndrome) is a polysymptomatic disorder that begins before age 30 years, extends over a period of years, and is characterised by a combination of pain, gastrointestinal, sexual, and pseudoneurological symptoms.

Appendix B

A reference list for evidence based guidelines for:

- Acute Stress Disorder

- Post Traumatic Stress Disorder

- Major Depression & other

- Anxiety Disorders

- Others e.g. Schizophrenia, Bipolar

Can be accessed on:

American Psychiatric Association (APA) (membership login required)
http://www.psych.org/

Australian Centre for Posttraumatic Mental Health (ACPMH)
http://www.acpmh.unimelb.edu.au

National Health & Medical Research Council (NH&MRC)
http://www.nhmrc.gov.au/guidelines

National Institute of Clinical Excellence UK (NICE)
http://guidance.nice.org.uk/guidance/cg/published/

Royal Australian & New Zealand College of Psychiatrists (RANZCP)
http://www.ranzcp.org/resources/practice-guidelines.html

Appendix C – Excellent resources

Danieli, Y., Brom, D., Sills, J. (2005). The Trauma of Terrorism: Sharing Knowledge and Shared Care – An International Handbook. New York: The Haworth Press.

Neria, Y., Galea, S., & Norris, F.H. (2009). Mental Health and Disasters. New York: Cambridge University Press.

Neria, Y., Gross, R., Marshall, R. & Susser, E. (2006). 9/11: Mental Health in the Wake of Terrorist Attacks. New York: Cambridge University Press.

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Ritchie, E.C., Watson, P.J. & Friedman, M.J. (2006). Interventions Following Mass Violence and Disasters. New York: The Guilford Press.

Rynearson, E.K. (2006). Violent Death: Resilience and Intervention Beyond the Crisis. New York: Routledge.

Schein, L.A., Spitz, H.I., Burlingame, G.M., Muskin, P.R. & Vargo, AS. (2006). Psychological Effects of Catastrophic Disasters: Group Approaches to Treatment. New York: The Haworth Press.

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Appendix D

(Practical Material from Earlier Guidelines, Disaster Mental Health Response Handbook NSW Health, pgs 91-112.)

General practitioners

Many people present to their local primary care health provider in the post-disaster period (Ursano et al, 1996). This may be with acute distress related to their experience, or seeking support or counselling, or perhaps something to help them sleep or 'settle down'. It is important that these 'gatekeepers' be alert to the normal responses to disaster, in order not to 'pathologise' normal recovery. More generally and in the ensuing weeks however, there are commonly presentations with general somatic complaints such as headaches, tension, tiredness and stomach upsets. Unfortunately there are few systematic studies of general health effects or help-seeking behaviour, but those that have explored these issues have found higher self-reported rates of a number of conditions (Clayer et al, 1990).

General practitioners should be aware of the potential for people experiencing the psychosocial effects of disaster to present in primary care. A careful querying may reveal the onset of symptoms and their relationship to distressing disaster exposures. It should also be noted that there may be potential for effects on physical health through impact of immune function, health related behaviours and perhaps other mechanisms.

Mental health services should provide information to general practitioners about mental health issues post-disaster, as well as ensuring consultative processes are available and where appropriate, access to specialist mental health care.

Referral to specialist services

Specialist referral is necessary in some instances and should be carried out supportively. The problems outlined below need particular attention and referral to professional services specialising in these (Raphael, 1993).

- **Extreme agitation,** particularly if it leads to actions that are life-threatening to the self or others.
- **Overt psychiatric disturbance** requiring care in its own right, for example, 'psychotic' decompensation where the affected person appears out of touch with

reality and perhaps even responding to hallucinations or delusions. This is rare but may occur.

- **Prolonged denial of reality.** Some shutting out of what has happened is natural initially but the person who continues, for example, to talk about somebody killed in a disaster as if he or she was still alive is likely to need specialist care.

- Persons distressed by **overwhelming bouts of anxiety**, dread, or panic when the danger has long since passed. Some panic is natural in the beginning but when this does not gradually fade and lessen in intensity as the weeks and months progress, then specialised assistance is probably necessary.

- Although some **depression** is very likely in the aftermath of disaster a picture of severe depression, accompanied by hopelessness, unremitting despair and a loss of belief in any worthwhile future indicates a severe response. In addition, if self-esteem is low, sleep severely impaired, there is marked weight loss and loss of interest in the world, and a general slowing-down in all activities, then a depressive illness should be suspected and specialist assistance sought urgently.

- Although **suicide** is not that common after disaster, one should be alert to the possibility that feelings of hopelessness may be associated with this level of despair. Similarly a bereaved person preoccupied with thoughts of reunion with someone who has died in the disaster should be of concern.

- **Body complaints** particularly mild, ill-defined and chronic complaints such as listlessness and headaches, often accompanied by irritability and sleep disturbance, may reflect chronic, hidden and unresolved psychological distress that requires assessment, possible psychiatric illness, or a risk of developing physical ill-health.

- **Disturbed interpersonal relationships** appear as a severe and prolonged disturbance of the capacity for interpersonal relationships (for instance in family or marital breakdown, rejection or the formation of only transient relationships).

- **Posttraumatic stress disorder.** This is a serious and disabling condition and often becomes chronic unless treated early in its course and with the most effective forms of treatment. People with such indicators should be referred to specialist professionals and services for assessment and care. People with PTSD are also at increased risk of other psychiatric problems such as severe depression or alcohol and other drug problems and thus may develop a series of chronic conditions needing care.

- **Alcohol or medication abuse** may be another symptom of the person's attempts to deal with unresolved psychological distress related to the disaster experience. Many attempt to shut out or numb painful experiences in this way, but such coping devices usually only lead to further difficulties. If this cycle cannot be broken by the support being provided, specialist referral is suggested.

(Raphael, 1993)

Interventions for specific disorders

The interventions and treatment strategies described in this section will be based on empirical findings from the current literature on reactions following traumatic events.

Clinical researchers studying the efficacy of various interventions for posttraumatic reactions have recommended waiting at least 2 weeks to a month after a traumatic event before providing therapy of any kind (Foa et al, 1995). They note that survivors may be in a state of shock immediately after the traumatic experience. Depending on the nature of the event, survivors may also be initially overwhelmed with practical demands, such as the need for food, immediate and long-term shelter, transportation to work, medical attention etc. These immediate responses need to be addressed before any psychological intervention can be meaningfully undertaken. In some cases, attention to these basic needs may be the most effective preventive intervention for psychological health (Solomon, 1999).

Nevertheless when distress is extreme it may be essential to provide general supportive counselling that may link to later specific interventions. Medications, particularly anxiolytics, may be required or other appropriate interventions as indicated.

Therapeutic interventions for traumatic stress syndromes

The treatment of survivors with acute traumatic reactions presents a particular challenge to the field of traumatic stress. To date, most of the treatment literature has examined the use of a range of techniques in sufferers with established diagnoses of PTSD. There is very little empirical information from outcome studies as to how to best treat acute stress reactions. There is no single recognised method for the effective treatment of acute traumatic reactions (Foa et al, 1999). However, there are a number of interventions which have been shown to be effective in the treatment of ASD and PTSD. These are reviewed here.

Acute stress disorder

Pharmacotherapy

Pharmacological interventions for acute trauma responses have received particularly little research attention. Two uncontrolled pilot studies involving three and four patients, respectively, have found positive effects for tricyclic antidepressants (Blake, 1986) and hypnotic medication (Mellman et al, 1998), perhaps because of improved sleep patterns during the acute stage of traumatic response. Thus far only one controlled study of medication for the treatment of acute stress response has been conducted (Gelpin et al, 1996), and this study (using benzodiazepines) found no benefit to recipients after 6 months, relative to that for matched trauma survivors receiving no medication Solomon, 1999).

Cognitive-behavioural interventions

The most encouraging studies are those examining cognitive behavioural therapy (CBT) as a treatment for acute trauma responses. CBT involves the activation of the fear structure, and introduction of information that is incompatible with pathological elements of that structure (Solomon, 1999).

Support for cognitive-behavioural techniques has come from various studies which have looked at a wide variety of traumatic experiences, including, assault (Foa at al, 1995), and accident survivors (Bryant et al, 1998b). Bryant and colleagues (1998b) randomly allocated ASD sufferers to either of two treatment groups: brief cognitive-behavioural intervention (5 sessions), or supportive counselling. The CBT intervention involved prolonged imaginal exposure, cognitive therapy and anxiety management. Supportive counselling involved non-directive counselling and general problem-solving. These authors found that 17% of the CBT group, and 67% of the supportive counselling group met criteria for PTSD at 6 months posttrauma. This finding indicated that CBT was an effective technique for resolving acute trauma responses that would otherwise lead to chronic PTSD. In an effort to delineate the key therapeutic component(s) within the CBT package offered, Bryant and colleagues (1999) compared prolonged exposure and anxiety management. This recent study showed that prolonged exposure may be the most critical component in the treatment of ASD.

However, it must be emphasised that exposure is not suitable for everyone, for example, the bereaved and torture survivors. There are a number of potential barriers to conducting

exposure therapy and also certain groups with which this technique is contraindicated (Bryant & Harvey, 2000).

Important notes about CBT following disaster

There are a number of important points to note about using CBT within individuals who have recently been through a very stressful experience.

Cognitive Therapy

- Modifying people's exaggerated interpretations needs to recognise that many of these thoughts are based on experiences that are real and recent. Accordingly, it is important to not communicate to individuals that the severity or reality of these experiences is being minimised.
- The post-disaster period often involves ongoing negative experiences. Accordingly, it is important for therapists to realise that cognitive therapy needs to be realistic and to recognise the likelihood of future negative experiences.
- It is useful to remember that it is unrealistic to think that the therapist can modify beliefs that are based on experiences that occurred in the recent past. The expectations of cognitive therapy are somewhat different for disaster survivors because it is often very difficult for people to adjust their perceptions when the precipitating event is only recent.
- In the acute phase, it can be useful to focus on beliefs about future adjustment rather than beliefs about the experience itself. For example, it is commonly easier for a disaster survivor to try to modify beliefs that they will always feel the way they currently feel than to change perceptions about the disaster.

Potential obstacles to exposure therapy

Excessive avoidance

A common obstacle to treating ASD is the extent to which the person actively avoids confronting his or her traumatic memories or feared situations. Clients may engage in overt or covert avoidance strategies to minimise distress during exposure. For example, clients

may think of less distressing aspects of the trauma to limit their distress. Rationale for exposure may need to be further discussed. Clients may feel more comfortable in doing exposure on less distressing aspects of the trauma before moving onto more distressing ones.

NOTE: Exposure is based on the principle that avoidance is maladaptive. In the acute phase following a disaster, the therapist must be cautious in defining avoidance as maladaptive because avoidance can often be a useful coping mechanism. Research suggests that ongoing and pervasive avoidance tends to be problematic. Many avoidance tendencies observed in the acute phase will ease as time progresses.

Dissociation

Dissociation can impede activation of fear networks and preclude habituation because of limited emotional engagement. This may be overcome by directing attention to emotions that are accessible but be wary that the client may need this defense to avoid memories they are unable to currently manage.

Anger

Anger is a very common response after a traumatic experience. Anger responses are particularly prevalent in victims of violent crime. Research indicates that anger responses to trauma memories will not benefit markedly from exposure because these individuals do not experience elevated fear relative to their anger. Cognitive therapy may be a more beneficial approach in these cases.

Bereavement/grief

Grief is a very common condition after a traumatic event when a loss has occurred (Raphael & Martinek, 1997). Moreover, posttraumatic stress and grief interact to compound the clinical presentation (Goenjian et al, 1995). The use of exposure in the acute trauma phase should be exercised cautiously, if at all, with people who present with grief issues. Acute grief reactions may also be characterised by intrusive symptoms, numbing, and a degree of avoidance as described above, but these phenomena differ from those of traumatic stress reactions. The bereavement process requires time, however, and it may not be appropriate to provide the acutely grieving client with exposure when she or he is coming to terms with

loss. Recognising the need for people to proceed through the grieving process often involves not overburdening clients with exposure in the acute phase.

Catastrophic beliefs

Repeated exposure may not benefit clients who interpret their memories in a catastrophic or overly negative way. Issues of guilt, responsibility, and blame may be particularly prevalent in these cases. Cognitive therapy should be actively pursued in conjunction with exposure.

Ambivalence / low motivation

Clients may not participate in exposure because of poor motivation to cooperate in this approach. They may require the rationale for exposure to be revisited and the client's motivation for treatment to be reevaluated. (Bryant & Harvey, 2000).

Possible contraindications for exposure therapy

Bryant & Harvey (2000) suggest that caution be exercised and the use of exposure be seriously questioned when the acutely traumatised client presents with one of the following problems:

- Extreme anxiety
- Panic attacks
- Marked dissociation
- Borderline personality disorder
- Psychotic illness
- Anger as a primary trauma response
- Unresolved prior traumas (eg. Refugees)
- Severe depression or suicide risk
- Complex comorbidity
- Substance abuse
- Marked ongoing stressors (eg. Medical procedures)
- Acute bereavement

In cases where exposure is contraindicated, other techniques, including anxiety management, cognitive therapy or pharmacological intervention may be effective (Bryant & Harvey, 2000).

Posttraumatic stress disorder

The recent publication of the PTSD: Expert Consensus Treatment Guidelines by the International Society for Traumatic Stress Studies (Foa et al, 1999) indicated that while there was a wide variety of interventions being used to treat PTSD, very few of them were empirically tested and evidence-based. Those techniques recommended by this 'expert' panel and supported by research outcome data are reviewed below.

Pharmacotherapy

Pharmacotherapy for PTSD is predicated on compelling findings that a number of key psychobiological systems are dysregulated in PTSD patients. The strongest evidence shows disruption of adrenergic and hypothalamic-pituitary-adrenocorticol (HPA) mechanisms, heightened physiological reactivity, and sleep disturbances. PTSD-related abnormalities have also been detected or inferred about the serotonin, opioid, dopamine, thyroid, corticotropin-realising-factor (CRF) and glutamatergic systems. Finally, the very frequent comorbidity with pharmacologically responsive disorders (eg. major depression, panic) makes pharmacotherapy an important treatment option to be considered in PTSD (Foa et al, 2000).

Because of so many different psychobiological abnormalities, almost every class of psychotropic agent has been prescribed for PTSD patients. Most studies involve antidepressants: selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors (MAOIs), tricyclic antidepressants (TCAs) and other serotonergic agents (eg. nefazodone). Antiadrenergic drugs tested include alpha-2 receptor agonists (clonidine and guanfacine) and the beta receptor antagonist (propanolol). Mood stabilising anticonvulsants have also been tested. Other drugs tested include benzodiazepine anxiolytics and antipsychotic agents.

The strength of the evidence is best for the different classes of antidepressant agents that have been tested in most of the randomised clinical trials on pharmacotherapy. Clinical trials without randomisation or control have been carried out on antidepressants, antiadrenergic

agents, anticonvulsants and benzodiazepines. The only evidence for other drugs is based mostly on anecdotal observations and case reports.

The best evidence supports the use of SSRIs as first line drugs for PTSD. They not only reduce PTSD symptoms and produce global improvement but are also effective against comorbid disorders and associated symptoms They have relatively few side effects. However, it should be noted that they may be less effective for combat veterans than for other PTSD patients. There is also good evidence suggesting that MAOIs are moderately, and TCAs mildly effective agents, although both may produce adverse side effects. These drugs have been found to have greater efficacy than SSRIs for combat veterans with PTSD. Evidence supporting the use of antiadrenergic and anticonvulsants is not strong, not because of negative findings, but because there have been no randomised trials with either class of drugs. There is evidence to suggest that benzodiazepines are not useful for treating intrusion and avoidance symptoms of PTSD. Finally, antipsychotic agents cannot be recommended as a first line therapy at this time because only a few case reports have appeared in the literature.

Cognitive-behavioural interventions

Extensive literature reviews conducted revealed that there was evidence demonstrating the utility of many cognitive-behavioural interventions for the reduction of PTSD (Foa et al, 2000). These included:

- Systematic desensitisation
- Exposure
- Stress inoculation training
- Cognitive therapy
- Cognitive processing therapy
- Assertiveness training
- Relaxation therapy
- Combination treatments

Comparing the numbers of studies and types of studies supporting each type of treatment, it was found that exposure has the greatest number of well-controlled studies to support its use (Foa et al, 2000). Thus, the use of exposure therapy was strongly recommended in the

treatment of PSTD, unless otherwise indicated (see contraindications listed in previous section).

Both stress inoculation training and cognitive processing therapy have been demonstrated to be effective in well-controlled studies of rape-related PTSD, and thus are also recommended for use. However, cognitive processing therapy focuses on rape-related issues and would therefore be inappropriate with other trauma-affected populations. Cognitive therapy has been found to be effective across a range of studies and target groups and is therefore recommended. Assertiveness training has shown utility in decreasing PTSD in only one study and therefore this is recommended with caution until other studies are conducted. Systematic desensitisation has generally been replaced by exposure and would not be recommended. One study found relaxation training to be useful but significantly less effective than exposure, cognitive therapy or the combination of the two. Another study found relaxation to be effective only on the arousal symptoms with recent trauma survivors.

Some of the most commonly used psychotherapeutic techniques are listed and described in Table 13. This has been provided for resource information only.

Table 13: The most commonly used psychotherapeutic techniques for PTSD

- **Anxiety management** (stress inoculation training): teaching a set of skills that will help people cope with stress.
- **Relaxation training**: teaching clients to control fear and anxiety through the systematic relaxation of the major muscle groups.
- **Breathing retraining:** teaching slow, abdominal breathing to help the client relax and/or avoid hyperventilation with its unpleasant and often frightening physical sensations.
- **Positive thinking and self-talk**: Teaching the person how to replace negative thoughts (eg. I'm going to lose control), with positive thoughts (eg. I did it before and I can do it again), when anticipating or confronting stressors.
- **Assertiveness training**: teaching the person how to express wishes, opinions, and emotions appropriately and without alienating others.
- **Thought stopping**: distraction techniques to overcome distressing thoughts by inwardly 'shouting stop'.

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- **Cognitive therapy:** helping to modify unrealistic assumptions, beliefs, and automatic thoughts that lead to disturbing emotions and impaired functioning. For example, trauma victims often have unrealistic guilt related to the trauma: a rape victim may blame herself for the rape; a war veteran may feel it was his fault that his best friend was killed. The goal of cognitive therapy is to teach clients to identify their own particular dysfunctional cognitions, weigh the evidence for and against them, and adopt more realistic thoughts that will generate more balanced emotions.
- **Exposure therapy:** helping the person to confront specific situations, people, objects, memories, or emotions that have become associated with the stressor and now evoke an unrealistically intense fear. This can be done in two ways:
    - **Imaginal exposure:** the repeated emotional recounting of the traumatic memories until they no longer evoke high levels of distress.
    - **In vivo exposure:** confrontation with situations that are now safe, but which the individual avoids because they have become associated with the trauma and trigger strong fear (eg. driving a car again after being involved in an accident; using elevators again after being assaulted in an elevator). Repeated exposures help the person realise that the feared situation is no longer dangerous and that the fear will dissipate if the person remains in the situation long enough rather than escaping it.
- **Play therapy:** therapy for children employing games to allow the introduction of topics that cannot be effectively addressed more directly and to facilitate the exposure to, and the reprocessing of, the traumatic memories.
- **Psychoeducation:** educating patients and their families about the symptoms of PTSD and the various treatments that are available for it. Reassurance is given that PTSD symptoms are normal and expectable shortly after a trauma and can be overcome with time and treatment. Also includes education about the symptoms and treatment of any comorbid disorders.

Source: Foa et al (1999).

EMDR and other Neoteric approaches to the treatment of PTSD

Eye Movement Desensitisation and Reprocessing (EMDR), Thought Field Therapy (TFT), Traumatic Incident Reduction (TIR), Time-Limited Trauma Therapy (T-LTT), and Visual/Kinesthetic Dissociation (V/KD) are recent approaches that have been offered as treatments of PTSD. Each of these new methods is based on theoretical frameworks that lack any empirical support or sound scientific rationale (see Herbert et al, in press; Rosen et al, 1998 for comprehensive reviews).

Whereas there is a body of research on the utility of EMDR in treating PTSD, there are no controlled treatment outcome studies on these other techniques. That is, there is no scientific rationale for using these techniques with traumatised populations. The absence of empirical support and the use of unjustified rationales indicate that the use of these approaches is strongly contraindicated.

In terms of EMDR, there is increasing research that this intervention should not be considered the treatment of choice. Whereas initial studies demonstrated that it is more effective than wait-list controls (Wilson, Becker & Tinker, 1995), relaxation training and biofeedback (Carlson, Chemtob, Rusnak, Hedlund & Muraoka, 1998), more rigorous studies challenge its efficacy. Numerous studies now indicate that eye movements themselves are irrelevant to treatment outcome (see Lohr et al, 1998; McNally, 1999 for reviews). Long-term follow up studies of people treated with EMDR indicate that initial gains are lost over time (Macklin, Metzger, Lasko, Berry, Orr & Pitman, 2000). Further, there is evidence that EMDR is not as effective as CBT methods in reducing PTSD symptoms (Devilly & Spence, 1999).

In summary, EMDR is not a recommended treatment of PTSD. It lacks the empirical support to satisfy current standards of acceptable treatments for survivors of disaster or trauma. Practitioners should be wary of any of the neoteric approaches, including EMDR, in managing the psychological effects of trauma.

Interventions for bereavement

Interventions for the bereaved may range from population based approaches which incorporate social, cultural, psychological and biological processes; to prevention counselling and programs for those at high risk of bereavement-related pathology; to the specific

psychotherapeutic interventions for bereavement specific morbidity; to the therapies relevant for bereavement precipitated psychiatric morbidity. Psychopharmacological interventions are relevant where indicated, for particular disorders that may arise either precipitated by bereavement or occur in bereaved populations. They should be specific for the conditions and based on best available evidence of what is effective (Raphael, Minkov & Dobson, 2000).

Preventive interventions for individuals at higher risk

Such interventions are targeted to individuals, who through screening or assessment, or because of what is known of their experience can be identified as more vulnerable. Risk factors have been described in previous sections, eg. nature of the relationship with the person who died; preexisting psychiatric vulnerability; traumatic circumstances of the death, ie. sudden, unexpected; and other adverse life experiences occurring in the time around and after the loss, lack of social support, high levels of initial grief-related reactions.

Preventive approaches are usually provided for individuals in what are psychotherapeutic type modalities, for instance as in crisis intervention. However, they are not actually treatments, for the bereaved person is not ill. Nevertheless, they may utilise counselling and psychotherapeutic / psychodynamic principles. Group interventions may also be appropriate, as may those targeted to families. Self help groups frequently provide social support, opportunities to express grief and may be a vehicle for intervention (Raphael et al, 2000).

Preventive interventions described and shown to be effective include **crisis intervention** for bereaved widows. This modality uses up to 6-8 sessions of focussed counselling in the early weeks and months following the loss. It encourages the expression of separation distress, angry protest, and subsequently mourning for the dead person with review of the lost relationship in its positive and negative aspects and expression of relevant affects such as sadness. Other components include a specific review of the circumstances of the death, and working through of the reactions to these. Opportunities to enhance supportive response from the social network are also incorporated (Raphael, 1977).

There have also been studies and intervention programs for parents following the death of a child, where the bereaved show higher levels of risk especially where the death has occurred in traumatic circumstances. For example, Murphy (1996) tested preventive intervention for 156 bereaved parents whose 12 – 28 year old children had died by accident, homicide or

suicide in a multisite longitudinal cohort design, pre and post test. This involved both problem focussed and emotion focussed support. Both these dimensions were considered to be very relevant, and selected intervention strategies included dealing with the parents' assumptions about the world, the experience of victimisation, issues related to the family life cycle and social support.

Of great interest is the effect of **bereavement on children** (eg. death of a parent) and whether or not **preventive programs** can lessen adverse impacts for them. Studies of parental bereavement intervention programs suggest that there may be significant benefits, although many are limited in both conceptual and methodological terms. Lohnes and Kalter (1994) describe a model of time-limited intervention groups for such children and that there are common emergent themes which need to be taken into account. For instance children continue to struggle with the stress well beyond the loss, and there is a need to maintain an internal representation of the dead parent that is an important component of the bereavement process. Such understandings are critical, for the child must take-in the experience and respond in 'doses' and time periods that can be modulated to his or her development, resiliency, and environment. Other work has emphasised the importance of a sense of ongoing family security after a parent dies, and the continuity of a family environment of attachment and care. It is often only with this type of security assured that the child can, when ready, and often later, deal with his or her loss.

A family oriented prevention program for children in such circumstances has been described by Sandler et al (1992) in the format of a family bereavement program. This program was specifically designed to improve variables in the family environment which were identified mediators of the effects of parental death on family mental health. This was a randomised controlled trial. The researchers found that the interventions lead to parents experiencing increased warmth in their relationships with their children, increased satisfaction with their social support, and maintenance of family discussion of grief related matters.

The relevance of grief for **older populations** and the particular issues for preventive intervention with this group have been described by a number of workers. For instance a focus on enhancing the sense of control as a personal quality, through self help group intervention was found to be associated with decreased psychological distress (McKibbin et al, 1997). Another study of self-help groups also showed that the use of personal skills in

these contexts can reduce reports of depression and prolonged grief, indicating an important prevention outcome (Casserta et al, 1995). As bereavement may be an important factor in precipitating depression in older people, programs focussed for the bereaved who are at risk, and bereavement in high risk situations such as nursing homes (Murphy et al, 1997) can be important in prevention. Suicide is also a higher risk in older bereaved people, especially older males and this adds to the importance of a focus on these bereaved populations where suicidal ideation and death wishes are often prevalent (Byrne & Raphael, in press).

Psychotherapeutic treatments

The basis for treatment for bereaved people **merges with that of prevention** in that where there is specific bereavement related pathology such as a pattern of abnormal grief, there will be **attempts to facilitate normal grieving**. The various modalities that have been employed to achieve this will be discussed below. In addition, there are the complications of bereavement that may require treatment, specifically the development of posttraumatic stress disorder, the development of bereavement related depression, or anxiety disorders, or the precipitation of other illness, for instance an episode of bipolar disorder (Raphael et al, 2000).

Treatments for bereavement pathologies
A number of researchers have provided evidence for the effectiveness of a range of psychotherapeutic modalities. For example, the work of Kleber and Brom (1992) which focuses on prolonged or abnormal grief, showed that a 12-15 session psychotherapeutic program was more effective than a wait-list control condition, although avoidant behaviours were more resistant to intervention. This dealt with facilitating normal grieving, and the working through of the loss through psychodynamically oriented, compared to other patterns of psychological intervention (hypnotherapy and behavioural). All were effective to a degree, with the psychotherapeutic interventions being most helpful for the avoidant phenomena. Horowitz's group has provided the most detailed review and examination of psychotherapy in a study of the effectiveness of psychotherapeutic techniques for abnormal grief and examined the relationship of process to outcomes (Horowitz et al, 1984).

In each of these cases, the psychotherapeutic aim is that of **facilitating** a 'normal grieving' or bereavement process, whether through psychodynamic or behavioural principles. This involves key elements of dealing with the circumstances of the death; reviewing the lost

relationship; expression of the various affects of grief; mourning the deceased, both psychologically and in ritual; coming to some terms with the new realities that result from the loss, including any altered role or status; dealing with concurrent life stressors; and achieving the necessary tasks of a practical nature during this period (Raphael et al, 2000). These interventions are brief, targeted, and do not usually engage the broader complex issues of the bereaved person's life. Several practical handbooks are available which describe these and other techniques in work with both adults (Worden, 1991; Lendrum & Syme, 1992) and children (Dyregrov, 1990). Some more specific techniques are described below.

- Using photographs, possessions and other symbols of the deceased to promote both registration of the loss and the formation of an internal relationship.
- Writing or drawing, which can tap emotions that may be difficult to verbalise. These methods may also be used as symbolic communication with the deceased allowing "unfinished business" to be dealt with.
- Creating rituals, which may be private or shared, and which can be a way of remembering or commemorating the dead person. They may also help to make a change or transition, particularly for those who are 'stuck'.
- Cognitive restructuring, which involves confronting and testing out distorted beliefs that may be uncovered by grief and may be maintaining a pathological response (Kavanagh, 1990).

Posttraumatic stress disorder and bereavement

Initially bereavement was seen as a traumatic stressor that could lead to stress response syndromes but later, particularly with the development of the diagnostic criteria for PTSD in DSM-IV and it became increasingly clear that normal bereavement could not really be seen as a stressor meeting DSM-IV, criterion A.

Recently, Schut and colleagues have carried out systematic studies of PTSD and bereavement. They found this disorder to be frequent amongst the bereaved, and often correlated with the perceived inadequacy of the goodbye said to the deceased. They concluded that creating opportunities for 'saying farewell' to the deceased, for instance in grief therapy, may be important components that can facilitate recovery (Schut et al, 1997).

The dearth of good studies on effective treatment for PTSD, with the usual modalities being cognitive behavioural therapy (eg. Bryant et al, 1998b), and pharmacological treatments (see

Foa et al, 1999), means that these should be considered early in the treatment program in relevant cases. Medication if required is usually in the realm of antidepressants, although minor tranquillisers may be helpful in the acute phase. A combination of biopsychosocial assessments, with interventions dealing first with the trauma, and then gradually the loss, is most likely to achieve better outcomes, although there is a need for controlled trials to establish a scientific basis for these programs and their outcomes (Raphael et al, 2000). Caution about exposure therapy components is also indicated (see above).

Depression and related disorders and bereavement

There has long been a conceptual difficulty in separating the phenomenology of bereavement reactions from those of depression. Indeed some researchers initially described the process of bereavement as a 'reactive depression' (eg. Parkes, 1972) and early studies used depression scales to measure the reaction to loss (Clayton, 1990).

Recent work has clearly differentiated both normal bereavement from depression and shown that abnormal bereavements such as chronic grief, 'complicated grief' or even 'traumatic grief' can be clearly differentiated from major depression and from anxiety disorders and other psychiatric disorders, although there may for some be an increased risk of also developing major depression in these circumstances (Horowitz et al, 1997; Prigerson et al, 1996; Raphael & Minkov, 1999).

Depression in relation to bereavement, at any stage of the life cycle, will need to be treated in its own right. Psychotherapeutic interventions will inevitably be part of this, and should be tailored both to developmental stage and to the modalities that are most likely to be effective for the particular pattern of illness. Cognitive behavioural therapy and interpersonal psychotherapy are predominant modalities. Antidepressants should be used as appropriate to the syndrome of depression, and if very severe and non responsive, electro-convulsive therapy may also be required. While reports to date focus on nortriptylene, new antidepressants may be relevant, but further trials for their value for such bereavement-related depressions are very necessary. They are not appropriate treatment for bereavement without depression.

Anxiety symptoms (separate from PTSD) are also found in the bereaved and some may be at greater risk of anxiety disorders than depression. For instance, Byrne and Raphael (1994) found a closer relationship between bereavement phenomena and anxiety symptoms, whereas Middleton et al (1998) point to a fairly consistent relationship with each. Anxiety

disorders such as generalised anxiety disorder, and phobic conditions have been described. Further, it is important to understand the difference between anxiety symptoms of a general kind and the separation anxiety or distress that is part of normal grief, but may be heightened in its more chronic or pathological forms (Raphael et al, 2000).

Bearing in mind these clinical and phenomenological distinctions, here as with depression, appropriate treatment for preexisting or precipitated disorders is that relevant for the diagnosis; including antidepressants, anxiolytics and psychotherapy, or behavioural interventions for the condition, and grief counselling to facilitate the resolution of the loss (Raphael et al, 2000).

Special issues in psychotherapy with bereaved people

Psychotherapy with bereaved people, regardless of modality adopted, requires a dynamic understanding of a number of important issues:

- The lowered defensiveness in the acute period following loss
- The intensity of the normal affective response at this time, and the painfulness of separation distress, yearning and longing
- The pervasiveness of angry protest
- The focus on sadness and exclusion of other relationships of the psychological mourning processes (Raphael et al, 2000).

The bereaved may find it difficult to engage with the therapist or may focus anger on them as they are there to console the loved one, when the deceased is not. They may attach to the therapist as a 'replacement' in an attempt to meet the desperation of their emptiness, all the while struggling for survival psychologically and physically to go on living, and resenting those like the therapist who do (Raphael et al, 2000).

As in all psychotherapy, but particularly for those acutely distressed, there needs to be a mix of humanity and compassion; of professionalism and patience; of sensitive timing of progress; and of taking a pace with the bereaved, but one that is not too slow. In terms of counter-transference, over-identification with the bereaved and their suffering, immersion in their grief, a reluctance to accept that the aims of therapy may be to facilitate but not complete these grieving processes, are all issues. And primarily too for the therapist is the reawakening of personal losses, the fears of loss and death and contagion by them, from the

bereaved. Trauma-related issues complicate this further. These and other parameters must be carefully monitored in this psychotherapy, as in all others (Raphael et al, 2000).

NOTE: **Debriefing is inappropriate for this population**. Recent reviews of the increasingly popular process of psychological debriefing, applied to a wide range of traumatic experiences, including traumatic bereavements, call for caution. This 'quick fix' has not been established to be effective for traumatic stress situations and may be counterproductive in some instances. Those suffering the double impact of loss and trauma may not benefit from automatically reviewing their experience at a time determined by a researcher, yet may be so affected as to require the outreach of a clinician (Raphael & Martinek, 1997).

Specific issues for disaster workers and mental health professionals

Working in the acute situation of a disaster can be both exciting and distressing. The mental health worker, like others responding at this time is likely to experience heightened arousal and an intense wish to help others and to 'make right' what has happened. There is likely to be a heightened reaction to others who are involved and an intense focus on the experience. There is also a greater sense of identification with those affected. The usual client-professional relationship that 'protects' both parties changes in the face of the acute emergency, the shared experience, and the lowering of social boundaries. This facilitates a compassionate helping response. However, workers need to be attuned to the nature of their own response in such circumstances and still retain their capacity for clinical observation as well as engagement and spontaneous care.

Mental health workers may also be stressed by their experience. This may occur because of exposure to the stressors that all disaster workers may face. In addition, there may be effects related to feelings of helplessness, not being in an active role, or more frequently, exposure to the experiences of others when these are shared, ie. some form of 'vicarious traumatisation'. Appropriate training, briefing, tours of duty, clinical review and supervision are likely to protect against negative effects of such exposure (Berah, Jones & Valent, 1984).

Interventions for special populations

Survivors of chemical/biological/radiological disasters (CBR)

Rapid, accurate triage and effective treatment will be the cornerstones of initial management after a CBR attack. See Table 14 for a summary of psychiatric intervention.

Distinguishing symptoms of hyperarousal from those of intoxication and infectious disease prodromes will be crucial. The type of exposure and any lack of complete information about the agent will increase uncertainty and the risk of psychiatric morbidity. The risk for secondary psychological trauma will increase if actions by leaders or helpers fail to provide a quick, accurate diagnosis, a sensitive process for communicating the nature of the risk, and a supportive environment for those exposed and their families (Holloway et al, 1997).

An attitude of expectation that those with hyperarousal or demoralisation will soon return to normal activities should be conveyed. Patients should be moved out of the patient role as quickly as possible. The assignment of simple tasks can help restore function to the psychological casualties. The recovery environment should be constructed to create a sense of safety and to counteract the helplessness induced by the terrorist act (Raphael et al, 1996).

Table 14: Psychiatric Intervention after a chemical or biological disaster

Interventions
• Prevention of group panic
• Careful, rapid medical evaluation and treatment
• Avoidance of emotion-based responses (eg. knee-jerk quarantine)
• Effective risk communication
• Control of symptoms secondary to hyperarousal
   - Reassurance
   - Medications for acute relief (as indicated)
• Management of anger, fear or both
• Management of misattribution of somatic symptoms
• Provision of respite as required
• Restoration of an effective, useful social role
• Return to usual sources of social supports in the community

Adapted from Holloway et al (1997).

Children and adolescents

Children's dependence and developmental levels are important to consider in planning appropriate responses to assist them to cope with disaster but some common principles, such as the provision of 'psychological first aid', are also highly appropriate (Pynoos & Nader, 1988).

Some treatment practices have been poorly researched; however there is increasing evidence for the effectiveness of interventions based on cognitive-behavioural principles and for programs to assist parents to aid in children's recovery. Families and schools play important preventive and protective roles and work on school-based programs may be used to identify at-risk children and promote recovery and resolution (Pynoos & Nader, 1993). Family interventions may be useful where parental response results in minimisation or denial of a child's distress and in increasing the family's ability to support the child (Pynoos & Nader, 1993).

Primary schools were used as a focus to screen children for persistent problems 6 months after the 1994 Sutherland bushfires (McDermott & Palmer, 1999) and to offer treatment. Schools and mental health staff had also collaborated in a pro-active mastery workbook.

Few treatment outcome studies are available to guide treatment selection for individual children with PTSD.

Goenjian et al (1997) examined the effectiveness of school-based grief/trauma focussed psychotherapy in reducing chronic PTSD and depressive symptoms in adolescents following an earthquake in Armenia. These authors argued that exploration, relaxation and desensitisation procedures and group support may be important therapeutic factors. A cognitive-behavioural-oriented group program delivered in schools, for children and adolescents with mild to moderately severe PTSD associated with a range of single-incident events, was followed by decreased scores on measures of PTSD, depression, anxiety and anger post-treatment and at follow-up, and internalising of locus of control at follow-up (March et al, 1998).

Clinicians vary in the degree to which they advocate explicit exposure techniques and there is little support for use of debriefing in the acute disaster aftermath (Yule, 1993).

Involvement of parents/carers, school supports and normalising the child's responses to disaster through psychoeducational approaches are core components of intervention. Additional specialised interventions may be necessary for more complex problematic responses such as depression, panic and dissociation. There is a lack of empirical support for the use of any particular psychotropic medications in children with PTSD (March et al, 1996) but these may be effective in producing some symptom reduction in the seriously affected individual child/adolescent (Davidson & March, 1997).

Older adults

Assessment

Specific assessment of the individual's physical capacity and functioning, cognitive, behavioural and emotional functioning is crucial. Each of these dimensions must be assessed to identify the individual's internal strengths and weaknesses as well as external resources and social support (Massey, 1997).

- A comprehensive assessment is recommended when working with older adults. It is important to begin with a **complete physical history**.
- Assessing the **instrumental activities of daily living** further aids the interviewer with information about whether the older adult can: use the telephone, take public transport, shop and pay bills, do housework. Following a disaster it has been noted that it is these instrumental activities that are most impacted. It has been recognised that it is often hard for younger adults to carry out these activities without problems. It may be nearly impossible for older adults, especially for the isolated homebound elderly.
- **Cognitive functioning** must be carefully looked at by the clinician. Common stress symptoms include confusion, inability to concentrate, and memory impairment. With older adults, the same symptoms may be mistakenly diagnosed as dementia, Alzheimer's or acute confusional states. It is important to keep in mind that most problems and post-disaster symptoms are normal reactions to abnormal events.

- **Behavioural functioning,** which is similar to and may include instrumental activities of daily living, can be assessed for the ability to look for and use community resources.
- The **psychological-emotional functioning** of the older adult may be determined. You want to know if they are depressed, traumatised, actively suicidal, crying, stuck on repetition on some parts of the 'story', hearing voices, seeing things not seen by others. Are they more suspicious than they used to be? Is this fear keeping them from obtaining assistance? Are the feelings causing them to withdraw and be alone? etc.

Interviewing techniques

Professional caregivers need to be skilled and trained in working with the older adult population. According to Mitchell and Resnick (1986) some helpful suggestions for interviewing older adults include:

- Treat older adults with respect. Do not talk to them as though they are children. Use their name and proper title.
- Provide accurate information to allay fears.
- Be very mindful of physical complaints such as chest pain, aching arms and hands, and sore feet.
- Avoid medicating unless specifically indicated.
- Clarify what you are doing to help them and return frequently to update them.
- Be willing to provide practical assistance as well as emotional support for older people.
- Older adults have a sense of 'immediacy' about them. They are often demanding if they are overwhelmed with problems.

It is important to keep in mind that older adults often under-utilise disaster assistance. Some of the most effective ways to break down the barrier of fear are home visits, willingness to provide transportation, and asking the older adult what would be most helpful (Massey, 1997).

Interventions

Interventions with older adults must include providing comfort for the older survivor who needs to feel an emotional sense of caring from the caregivers. This is the stage in the

process where time takes on particular importance. The older adult's feelings of being overwhelmed can be reduced by taking the time and care to break down the entire process into small steps and achievable goals (Massey, 1997).

However, it is important to remember that people who need help may not seek it. The older adult in particular may tend to rely upon informal support structures such as family, friends, and religious organisations. This reluctance to use formal assistance may

reflect a generational emphasis on independence and 'carrying one's own weight' and the stigma of 'public welfare' (Norris et al, 1994).

Given that older adults are generally reluctant to request assistance and do not seek out outpatient mental health services, a traditional 'office' approach in which clients are self-referred is not effective. Crisis intervention must assume a proactive approach in identifying those older adults in need of services. This may involve active casefinding and outreach services in the community. These **outreach efforts are most effective if they are linked to GPs and welfare services** and take the form of **assisting** older victims with the variety of **practical problems** arising during the impact period, such as needs for housing, medical care, material aid and social services (Norris et al, 1994).

Refugee and migrant populations

Assessment

Cunningham et al (1990) suggest the following strategies when caring for refugees who may be possible torture survivors:

- Arrange for an interpreter who is acceptable to the individual if appropriate.
- Identify the nature of the individual's complaints, their country of origin, date of migration, and residency status (those who are asylum seekers, refugees, or on Special Humanitarian Programmes are more likely to have been exposed to torture and trauma).
- Explain to the individual issues of confidentiality of the interview, and avoid writing down any notes that may be politically sensitive.

- When taking a history, avoid sounding interrogatory and preface all enquiries by explaining simply and clearly your purpose for asking questions.

- Focus on the individual's specific complaints but encourage them to share with you any other problems he or she may be experiencing. Individuals are often reluctant to volunteer information about their torture experiences but are likely to present with other complaints, often physical, mood related or social.

- Organise for an empathic and informed doctor to physically examine the individual if appropriate. The doctor should explain the purpose of each section of the examination and will need to take special care with any invasive techniques or potentially threatening instruments.

- Assist the individual with such practical needs as social welfare, housing, employment, social and leisure activities etc.

If the individual begins to open up and talk about his or her prior torture experiences, and these experiences appear to be central to their current psychological problems, then referral to or consultation with a specialised service for torture survivors is highly recommended. Barriers to assessment may include (Silove, 1994):

- The refugee's desire to forget the past and correspondingly any posttraumatic symptoms that remind them of those events.

- Shame about actions or responses they manifested during torture or other traumatic experiences and fear that closely guarded secrets may be revealed.

- Suspicion of authority figures (including those from their own culture) who may represent further 'trouble' from the government or other agencies.

- Persistent fear of revealing any health problems that may jeopardise their residency status, employability etc, or which may interfere with applications for migration of other family members.

- Reluctance, based on memories of bureaucratic procedures in the past, to complete forms or to be subjected to systematic questioning.

- Fear of being stigmatised as having a psychiatric disorder that is regarded with particular shame in many cultures.

- In some cases, fear of health personnel because of ill-treatment or complicity in torture by such professionals in their home countries.

Interventions

The majority of refugees or migrants affected by disaster may be adequately managed by existing mainstream mental health services, with the assistance of interpreters and bicultural workers, if required.

It is important that services are sensitive to cultural issues and differences between cultures. For example, there may be strong cultural prohibitions in some groups against showing emotions, particularly for men who may fear breaking down in front of other family members or female therapists (Silove et al, 1991). It will be important for services to encourage the use of traditional means of coping, eg. working with traditional healers, supporting grieving rituals, and also to mobilise existing community support structures. It will be vital to establish partnerships with local community organisations and liaise with community leaders and religious leaders (Morris & Silove, 1992).

Specialist referral to services for survivors of torture and trauma may be required for a small number of refugees who may experience a relapse of psychopathology related to previous traumatic events (eg. torture), or for those who have numerous risk and vulnerability factors, eg. social isolation, poor English language etc (Silove, 1994).

Community-based interventions

Disasters may have a profound impact on community systems and institutions particularly if there is massive structural damage, large number of deaths or deaths of significant leaders, or repeated severe threat, as with complex emergencies. By their very nature all disasters place some strain on communities.

'Emergency organisation' may spontaneously arise in the disaster impact or immediate aftermath when local leaders of the affected community and the community itself mobilise the earliest levels of response, before outside help arrives. This 'emergency organisation' may be lead by natural leaders or by the recognised leadership of the community. The emergency or disaster response services take over to provide the necessary support but

recognising and complimenting appropriate local action is important, especially in the recovery process.

Support for local organisations, including local government, recovery focussed groups, self-help associations and local leadership in affected communities can promote recovery and prevent disempowerment of those affected by disaster. Involvement of communities in their own recovery is paramount and this should include the management of community-based recovery processes including restoration or rebuilding utilisation of donated funds, decisions regarding memorials, testimony, and so forth.

Interventions should support personal and community strengths, enhance resilience, and build community capacity. Those providing mental health interventions may appropriately become involved, if invited or engaged to do so, and support psychosocial recovery. This may include advice regarding psychosocial aspects; prevention of scapegoating and splitting; identifying and supporting emergency needs; facilitating closure, and moving on.

It should be noted that the early responses of the community are frequently altruistic and affiliative – there is relief of those who have survived, lowering of social boundaries and a sense of special sharing between those who have been through 'the same thing'. This may include those who are rescuers from the outside. This positive phase is often known as the 'honeymoon' phase. Gradually, however, the realities of different experiences, loss, and the chronic stressors and distress that must be faced give way to anger, despair and the phase of 'disillusionment'. This may continue - to complicate recovery and even continue as a further or second disaster. However, for most individuals and communities this passes and the human strengths and community energies drive a renewal and moving on.

Longer-term follow-up

The magnitude of disaster-specific pathology can be managed in the early months. Ongoing problems can be linked to regular systems of mental health care provision. Nevertheless, as delayed-onset PTSD and other prolonged morbidity may appear, follow-up review at 6 and/or 12 months is likely to be helpful and can provide a more complete picture of disaster effects. Optimally however, while the effects of the disaster may have an ongoing impact, usual systems of care should provide the interventions and continuity needed.