



RESPONDING TO MENTAL HEALTH NEEDS IN DISASTERS

Recommendations for Policy and Practice in Hong Kong

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Key Messages

1. Psychological services are an integral component of the public health response in complex emergencies.
2. Effective and efficient implementation of psychological services requires robust coordination within and between organizations, and the availability of resources for specialized training, applied practice and service delivery.
3. Regulation of mental health providers is required to ensure that vulnerable populations receive evidence-based care, tailored to their specific needs.

The psychological impacts of disaster are an increasingly recognized public health priority. Yet the management of mental health risks is often poorly coordinated in the aftermath of complex emergencies. This policy brief outlines best practice for disaster psychology and the implementation of trauma-informed services in Hong Kong. Recommendations for practice and policy include improving resources for healthcare staff training in disaster mental health intervention, strengthening communication and coordination in the field, and ensuring regulation of practice following disasters in Hong Kong.

Best Practice for Psychological Services in Complex Emergencies

Acute stress is a common and normal reaction to trauma. However, one in four people exposed to natural disasters will develop post-traumatic stress disorder(PTSD)^{1,2} that has potential to last months or years. Mental health difficulties such as PTSD may result in illness and disability, loss of work productivity, substance abuse, and breakdown of family structures.³⁻⁵ Given Hong Kong's elevated disaster risk and large population there is a clear imperative to develop robust systems for psychological services dedicated to long-term disaster response.

Best practice for populations affected by disaster follows a stepped-care model of treatment to ensure effective and efficient delivery of services.^{6,7} The stepped-care model (see Figure 1) incorporates a set of staged interventions that increase with intensity over time. It represents an efficient use of limited resources available for disaster-affected communities, to ensure that low-

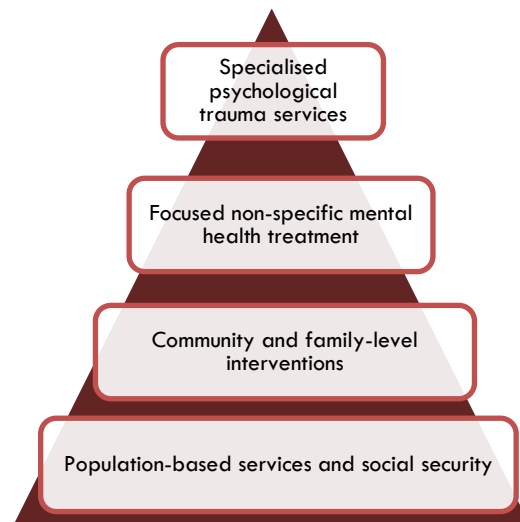


Figure 1: A stepped-care framework for psychological disaster response [adapted from Tol, W.A. et al. "Mental health and psychosocial support in humanitarian settings." *The Lancet* 2011. 378(9802):1585].

intensity interventions reach the broader community, and specialized services are reserved for the small proportion of the population who experience elevated levels of distress. Local mental health services often operate at full capacity and a disaster surge adds significant pressure to an already busy system.¹¹ The stepped-care model acknowledges the added burden created during a disaster, and highlights efficient means to deliver best practice. Applicable to both child and adult populations, the increasing intensity of interventions will progress at similar rates for all populations, but cover treatments tailored to individual needs and the local stage of economic and technological development.

Psychological First Aid

It is essential in all disaster response, and particularly when considering mental health interventions, to be sure that that basic social safety and immediate health needs are met. Psychological first aid (PFA) is recommended as the first line of response.^{12,13} PFA was developed via expert consensus and involves eight core actions aimed at relieving initial post-trauma distress (see Text Box 1).¹⁴ Designed to enable individuals to draw on their natural coping strategies and social support networks, the core actions

Text Box 1: Psychological First Aid

1. Respond to Contact

Respond to contact initiated by survivors in a compassionate manner.

2. Safety & Comfort

Enhance immediate and ongoing safety, help obtain food, water, shelter and emergency medical assistance.

3. Stabilization

Provide an environment that reduces stress, stabilizes people who are overwhelmed or disoriented.

4. Identify Immediate Needs

Determine immediate concerns, and tailor early interventions.

5. Practical Assistance

Offer practical help in addressing immediate concerns.

6. Promote Connectedness

Help people contact family and friends, and establish connections within the community.

7. Promote Self-Efficacy

Enable people to meet their own needs and problem solve. Reassure people that their feelings are normal, and convey an expectation that they will recover.

8. Linkage with Collaborative Services

Refer survivors to available services as needed.

include helping individuals engage with practical assistance; ensuring their safety and comfort; aiding in stabilization and coping strategies; and linking with collaborative services and existing social support.¹⁴

For local, regional and international disasters, the Hong Kong Hospital Authority (HA) plays an important role as the government's primary medical response service provider. Within the HA, Disaster Psychosocial Services Teams (DPSTs) are staffed by frontline psychology and social work professionals who volunteer their services in the hospital system. DPSTs provide PFA for patients and their families affected by local disasters, and the HA's Corporate Clinical Psychology Services respond internationally. With 20 PFA trainers and a large number of trained staff, the HA has scope to provide psychological first aid in a range of potential regional disaster scenarios.

Similarly, the Hong Kong Red Cross (HKRC) has an in-house clinical psychologist, 10 volunteer psychologists, 70 agency personnel and 300 voluntary community responders who have been trained in PFA with an aim to build community capacity for

psychological recovery following trauma. HKRC providers work according to a roster system and respond to a range of emergencies including airport-related incidents, vehicle accidents, school-based trauma, natural and industrial disasters, and complex emergencies such as the 2014 Occupy Central movement. Evidence from Hong Kong indicates that training in PFA not only improves the mental wellbeing of first

responders to disasters, but also enhances self-efficacy in their ability to offer emotional support to victims.¹⁵⁻¹⁷ For example, emergency responders who received training in PFA reported significantly more knowledge about disaster mental health, higher frequencies of helping behavior and greater psychological well-being than individuals who did not receive PFA training.¹⁵

Community-Level Mental Health Interventions

Re-establishing normal routines are vital for psychological recovery after disasters. For children, returning to school and usual activities with peers fosters a sense of belonging, custom, predictability, and normality. Similarly for adults, the ability to re-establish routine and access to regular services is vital, providing an avenue for social and occupational support which is closely associated with being able to adapt to stress and adversity.^{18,19}

Services that build on the strengths of a community may also help individuals cope with post-traumatic distress.²⁰⁻²² HKRC's Psychological Support Teams (PST) aim to provide community-level support to reduce emotional distress among people adversely affected by emergencies. For example, during the acute phase of a disaster, PSTs focus on psychological first aid and acute grief support. Their psychological support services include education about psychological responses to trauma, hotline psychological support, family reunification, and outreach support tailored to the nature of the crises.

Within hospitals, the HA has implemented a stepped-care model, where services are interlinked and adjustable so that care can be "stepped up" or "stepped down." As a first step (i.e., basic social services and social security), the Hospital Authority distributes disaster psychology educational materials targeted at patients, their families and healthcare workers, outlining common acute stress reactions and recommendations for facilitating recovery. For example, "Smile Again", an educational pamphlet for children and adolescents, outlines common grief reactions and self-help techniques. The development of a website to convey this material is currently in progress.

Specialized Care

One in four people affected by major natural disaster will develop post-traumatic stress disorder.^{1,2} Acute stress is a normal reaction to sudden shocks, but continuing distress and dysfunction in the months following a disaster require comprehensive psychological services. A number of treatments have demonstrated effectiveness for post-traumatic stress, depression, anxiety, and grief across high, middle and low-income countries.^{8,23} A significant evidence base supports the use of Cognitive Behavioral Therapy,²⁴ Trauma-Focused Cognitive Behavioral Therapy,²³ Narrative Exposure Therapy,²⁵ and Eye Movement Desensitization and Reprocessing (EMDR)²⁶ to improve psychological wellbeing among disaster survivors. Randomized controlled trials, which represent the highest standard of scientific evidence, have shown that Interpersonal Therapy²⁷ and Narrative Exposure Therapy²⁸ significantly reduced psychological distress among adult survivors of the 2008 Sichuan earthquake. For children and adolescents, Cognitive Behavioral Therapy was found to effectively decrease psychological distress following the 2003 Bam earthquake in Iran,²⁹ and Brief Trauma-Focused Psychotherapy significantly improved wellbeing when provided 1.5 years after the 1988 Armenian Spitak earthquake.³⁰ There is robust evidence to support the use of specialized psychological treatments for post-traumatic

psychological disorders. However, humanitarian responders attending to acute crises will not be able to assist with this level of care in the short-term, and so partnership with existing providers is critical to ensure ongoing continuity of care.

In Hong Kong, citizens have access to specialist psychological services through private providers, community clinics and hospitals. In the community, private clinical psychologists are available to deliver specialized care, although regulation of evidence-based practice following disasters is lacking. Hospitals provide a range of stepped care psychosocial services. Clinical psychologists and medical social workers trained in disaster mental health deliver evidence-based therapies including acute grief support, cognitive behavioral therapy (CBT) and eye movement desensitization and reprocessing (EMDR). The HA has recently established an integrated training model to expand the scope of psychological services provided within Hong Kong's hospitals.

There is a well-recognized risk of psychosocial stress for healthcare workers attending to emergencies. In response to staff needs within Hong Kong's hospital system, the HA has established Critical Incident Support Teams (CIST) that comprise 500 staff volunteers from various disciplines, poised to provide psychological assistance to frontline staff. CISTs are peer-support mechanisms that operate across all hospitals in Hong Kong. Members of the CISTs deliver early crisis intervention within the stepped care model of disaster response (outlined above). A second tier of clinical psychologists provide treatments for healthcare staff who require more intensive care, such as for a staff member who might report suicidal ideation, acute stress or psychopathology.

Current Gaps in Disaster Mental Health Policy and Practice

The treatment of psychological trauma requires a complex set of specialized skills. Without recognizing the specialist nature of services required, Hong Kong is limited in its capacity to engage with the public and promote effective services. Although the professional body, Hong Kong Psychological Society, has established a

Text Box 2: Psychological Practices to Avoid

Recent disasters in the Asia Pacific, Americas, Middle East, and Sub-Saharan Africa have seen the rise of "low impact/non-specialized" interventions commonly used to manage acute stress shortly after exposure to trauma. Often delivered by psychologists and counsellors who attend an emergency with limited experience in the affected setting, and provided outside the realm of local services, there is little evidence to support the use of these brief, non-specific therapies. A key example is the use of psychological debriefing, once highly popular as a treatment for traumatic exposure, critical incident debriefing has since been found to be ineffective and potentially harmful.⁸ WHO guidelines advise against using psychological debriefing or equivalent methods of intervention.⁹

Similarly, a range of creative arts activities show promise as interventions to improve wellbeing and emotion regulation, but do not yet have empirical support for use with survivors of trauma. The few studies that exist have been plagued by methodological constraints and poor fidelity to study protocols.^{5,10} Indeed, the paucity of research on using these types of interventions with trauma survivors suggests that more evidence is needed before low-intensity interventions are adopted as standard practice. Strong governance will ensure that practice is regulated in disasters, and therapies that have robust evidence to support their use are implemented for trauma-affected populations.

dedicated Critical Incident Team, the scope for evidence-based trauma response in the system is limited. For example, within the Hospital Authority's DPSTs, clinical psychologists and social workers who respond to crises are deemed to be acting in a volunteer capacity rather than as specialty responders. A formal governance system is needed to provide infrastructure, such as an "on-call" system, necessary for clinicians to mobilize during and after a disaster. Coordination between Hong Kong's government and organizational bodies, including the Hospital Authority, Bureau of Education, Social Welfare Department, Auxiliary Medical Service and Red Cross, would enhance opportunities for expanding mental healthcare coverage, advanced training in psychological support in disasters, and promoting recognition of the field.

The 2015 Hong Kong Disaster Preparedness Scoping Study highlighted a need for more training opportunities in Psychological First Aid.³¹ Among 676 healthcare workers interviewed, more than one third expressed a desire for training in PFA – a greater need than any other area of training. Although the HA and HKRC have implemented PFA training for staff and volunteers, ongoing professional development opportunities and structured activities for applied practice are lacking.

An additional area of concern is that community awareness about the importance of disaster psychology and services in Hong Kong is low.³¹ While the provision of a disaster psychosocial service is still in its initial stage of development, more effort is needed to promote public awareness of these services. Furthermore, prior research suggests that individuals experiencing mental health problems in Hong Kong reported feeling stigmatized due to their illness and often experienced social withdrawal as a result.³² Mental health stigma may act as a barrier to engaging with psychological services post-disaster. Similarly, a recent study following Hurricane Ike in the USA found that the majority of people with unmet psychological needs cited at least one barrier to engaging with psychological services.³³ Barriers included stigma associated with mental illness and the desire to resolve the problem on their own.

Long-term policy direction and more resources are needed to support the current system of psychosocial services, including promotion of the stepped care model of psychological services during and after disasters. Educating the community, training healthcare workers in psychological first aid, and implementing evidence based specialized care should be prioritized as part of disaster response planning.

Recommendations for Mental Health Practice in Disasters

1. Disaster mental health must be recognized as a specialty practice. Post-traumatic mental health difficulties can have significant and lasting social and economic impacts at an individual and community level. Awareness of the range and severity of mental health needs that arise from exposure to complex emergencies is vital for effective response. In doing so, there is potential for greater efficiency and effectiveness in health services and disaster response.

2. Disaster mental health intervention training is required across health and community services. Hong Kong has the infrastructure and expertise available to ensure timely and effective delivery of services,

but recognition of the specialized nature of trauma-focused response will enable the development of training programs and intervention delivery tailored to trauma-affected populations. Applied training courses ranging from Psychological First Aid to intensive trauma-focused treatments, conducted by reputable organizations and accompanied by robust supervision and professional development, will build capacity for response across service providers.

3. An integrated preparedness and response plan is needed. It is vital that an integrated plan for emergency preparedness and response be developed to mobilize both government departments and community organizations in times of crisis. The formal response plan should identify and engage community organizations in auxiliary roles to activate and assemble the resources required to address the surge in psychosocial needs during an emergency. The Hong Kong Jockey Club Disaster Preparedness and Response Institute may play a critical role in developing the plan, formalizing collaborations and delivering the training needed to build capacity across multiple stakeholders.

4. Formal governance structures are needed to support the implementation of evidence-based care. There is ample evidence to guide the delivery of effective treatments in disaster-affected settings. Local mental health providers play a pivotal role in alerting the community to the long-term impacts of disaster, combating stigma associated with mental illness through information dissemination, and providing stepped care as needed. Accordingly, mental healthcare providers should be familiar with and expertly trained in evidence-based treatments for trauma, grief, depression and anxiety. Regulatory processes and coordination of service delivery across hospitals, clinics, schools, non-government organizations and community settings will be required to ensure that evidence-based practices are implemented for the safety and protection of vulnerable populations.

5. Monitoring, evaluation and research should accompany best practice. Integrating the scientist-practitioner model in routine practice will facilitate the development of an evidence base for disaster mental health. Hong Kong has significant capacity for research and evaluation in this field that will elevate its standing as a leader in disaster mental health intervention. Facilitating the tracking and evaluation of outcomes both during and after disasters will enable informed decision making for future response.

6. Parameters must be developed for involvement in international assistance. Upon the request of foreign governments or senior stakeholders, Hong Kong may choose to provide international assistance in large-scale disasters. A number of Hong Kong-based NGOs including the HKRC and Medecins Sans Frontiers have a long history of responding to international crises. The wealth of experience already available in Hong Kong should be built on when developing Foreign Medical Teams and response protocols. Working within the WHO Guidelines for Foreign Medical Teams,⁹ it is important that international responders create minimal burden for traumatized populations and maximum opportunity for sustainable benefits. The following measures are recommended: (1) responding teams create partnerships with existing services to reduce duplication; (2) psychologists contribute to efforts to build capacity in local services; (3) government and NGO responders identify service providers with expertise and interests relevant to the affected population (including appropriate language skills, familiarity with

the setting, where available); and (4) responding teams ensure that evidence-base practice is employed for the safety and security of the community, with particular attention to the most vulnerable groups.

References

1. Zhang Z, Shi Z, Wang L, Liu M. One year later: mental health problems among survivors in hard-hit areas of the Wenchuan earthquake. *Public Health*. 2011;125(5):293-300.
2. Yelland C, Robinson P., Lock C., et al. "Bushfire impact on youth *Journal of Traumatic Stress*. 2010;23(2):274-277.
3. Alonso J, Petukhova M, Vilagut G, et al. Days out of role due to common physical and mental conditions: results from the WHO world mental health surveys. *Mol Psychiatry*. 2011;16(12):1234-1246.
4. Savoca E, Rosenheck R. The civilian labor market experiences of Vietnam-era veterans: the influence of psychiatric disorders. *The Journal of Mental Health Policy and Economics*. 2000;3(4):199-207.
5. Annan J, Green EP, Brier M. Promoting recovery after war in northern Uganda: reducing daily stressors by alleviating poverty. *Journal of Aggression, Maltreatment & Trauma*. 2013;22(8):849-868.
6. Bisson JI, Tavakoly B, Witteveen AB, et al. TENTS guidelines: development of post-disaster psychosocial care guidelines through a Delphi process. *Br J Psychiatry*. 2010;196(1):69-74.
7. Galea S, Nandi A, Vlahov D. The epidemiology of post-traumatic stress disorder after disasters. *Epidemiologic Reviews*. 2005;27(1):78-91.
8. Greenberg N, Brooks S, Dunn R. Latest developments in post-traumatic stress disorder: diagnosis and treatment. *Br Med Bull*. 2015;114(1):147-155.
9. Norton I, von Schreeb J, Aitken P, Herard P, Lajolo C. *Classification and Minimum Standards for Foreign Medical Teams in Sudden Onset Disasters*. Geneva, Switzerland: World Health Organization; 2013:103.
10. Descilo T, Vedamurtachar A, Gerbarg PL, et al. Effects of a yoga breath intervention alone and in combination with an exposure therapy for post-traumatic stress disorder and depression in survivors of the 2004 South-East Asia tsunami. *Acta Psychiatr Scand*. 2010;121(4):289-300.
11. McDermott BM, Cobham VE. A stepped-care model of post-disaster child and adolescent mental health service provision. *Eur J Psychotraumatol*. 2014;5.
12. Wade D, Howard A, Cooper J, Forbes D. Early response to psychological trauma. *Australian Family Physician*. 2013;42(9).
13. Telles S, Singh N, Balkrishna A. Managing mental health disorders resulting from trauma through yoga: a review. *Depress Res Treat*. 2012;2012:401513.
14. Ruzek JI, Brymer MJ, Jacobs AK, Layne CM, Vernberg EM, Watson PJ. Psychological first aid. *Journal of Mental Health Counseling*. 2007;29(1):17-49.
15. Cheung EYL, Chan EYY, Lin CLY, Lee PPY. Clinical effectiveness of psychological first aid training among emergency responders in Chinese population: preliminary results of 3-month follow-up. Paper presented at: 17th World Congress on Disaster and Emergency Medicine; May 29-June 3, 2011; Beijing, China.
16. Cheung EYL, Chan EY, Lin CLY, Lee PY, Zhu YJC. Preliminary results of psychological first aid capacity building program on coping strategies and mental health measures among emergency responders in disaster: results of 6-month follow-up of a randomized controlled trial. Paper presented at: 13th World Congress on Public Health; April 23-27, 2012; Addis Ababa, Ethiopia.

17. Cheung EYL, Chan EYY, Sin CKM, Wong, AH. Impact of psychological first aid training on disaster responding aid workers' mental well-being: a cross-sectional study two months after the vessel collision accident on the national day. Conference Paper presented at: 6th Global Conference of the Alliance for Healthy Cities; Oct 29-Nov 1, 2014; Hong Kong, China.
18. Betancourt TS, McBain R, Newnham EA, Brennan RT. Trajectories of internalizing problems in war-affected Sierra Leonean youth: examining conflict and postconflict factors. *Child Dev.* 2013;84(2):455-470.
19. Thormar S, Gersons B, Juen B, Marschang A, Djakababa M, Olff M. The mental health impact of volunteering in a disaster setting. *The Journal of Nervous and Mental Disease.* 2010;198:529-538.
20. Ager A, Akesson B, Stark L, et al. The impact of the school-based psychosocial structured activities (PSSA) program on conflict-affected children in Northern Uganda. *J Child Psychol Psychiatry.* 2011;52(11):1124-1133.
21. Loughry M, Ager A, Flouri E, Khamis V, Afana AH, Qouta S. The impact of structured activities among Palestinian children in a time of conflict. *J Child Psychol Psychiatry.* 2006;47(12):1211-1218.
22. Vijayakumar L, Suresh Kumar M. Trained volunteer-delivered mental health support to those bereaved by Asian tsunami-an evaluation. *International Journal of Social Psychiatry.* 2008;54(4):293-302.
23. Konanur S, Muller RT, Cinamon JS, Thornback K, Zorzella KP. Effectiveness of trauma-focused cognitive behavioral therapy in a community-based program. *Child Abuse Negl.* 2015.
24. Kar N. Cognitive behavioral therapy for the treatment of post-traumatic stress disorder: a review. *Neuropsychiatr Dis Treat.* 2011;7:167-181.
25. Zang Y, Hunt N, Cox T. Adapting narrative exposure therapy for Chinese earthquake survivors: a pilot randomised controlled feasibility study. *BMC Psychiatry.* 2014;14(262).
26. Natha F, Daiches A. The effectiveness of EMDR in reducing psychological distress in survivors of natural disasters: a review. *Journal of EMDR Practice and Research.* 2014;8(3):157-170.
27. Jiang RF, Tong HQ, K.L D, Neylan TC, Shi Q, Meffert SM. Interpersonal psychotherapy versus treatment as usual for PTSD and depression among Sichuan earthquake survivors: a randomized clinical trial. *Conflict and Health.* 2014;8(14).
28. Zang Y, Hunt N, Cox T. A randomised controlled pilot study: the effectiveness of narrative exposure therapy with adult survivors of the Sichuan earthquake. *BMC Psychiatry.* 2013;13(41).
29. Shoostary MH, Panaghi L, Moghadam JA. Outcome of cognitive behavioral therapy in adolescents after natural disaster. *J Adolesc Health.* 2008;42(5):466-472.
30. Goenjian AK, Walling D, Steinberg AM, Karayan I, Najarian LM, Pynoos R. A prospective study of posttraumatic stress and depressive reactions among treated and untreated adolescents 5 years after a catastrophic disaster. *Am J Psychiatry.* 2005;162(12):2302-2308.
31. Leaning J, Balsari S, Chan E, Hsiao K, Kashyap S, Lam D, Lam R, Newnham E, Patrick K, Pham P, Yeung M. *Disaster Preparedness in Hong Kong: a Scoping Study.* Boston, MA: François-Xavier Bagnoud Center for Health and Human Rights/Harvard T. H. Chan School of Public Health 2015.
32. Chien WT, Yeung FK, Chan AH. Perceived stigma of patients with severe mental illness in Hong Kong: relationships with patients' psychosocial conditions and attitudes of family caregivers and health professionals. *Adm Policy Ment Health.* 2014;41(2):237-251.
33. Lowe SR, Fink DS, Norris FH, Galea S. Frequencies and predictors of barriers to mental health service use: a longitudinal study of hurricane Ike survivors. *Soc Psychiatry Psychiatr Epidemiol.* 2015;50(1):99-108.



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