

An Overview of the Canterbury District Health Board (CDHB) Mental Health Service's Response to the 2010 - 2011 Canterbury Earthquakes

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On 4 September 2010, the people of Canterbury were subject to a rude awakening. We were dramatically shaken out of our complacency about natural disasters. Under a state of Civil Defence emergency it soon became apparent that mental health and psychological recovery were initially not key features of Civil Defence operations or of the Ministry of Social Development (MSD) led Psycho-social Recovery operations. Over the following months, relationships with Civil Defence and MSD personnel resulted in a recognition that mental health input was an integral part of a disaster response and recovery plan. In the Canterbury District Health Board (CDHB), Specialist Mental Health Service (SMHS) Allied Health Staff in particular were mobilised to provide assistance to the community in a variety of ways. Unfortunately, a little over 4 months later, the devastating 22 February earthquake hit Christchurch. In some ways the September experience served as 'dress rehearsal' for this and SMHS was able to mobilise a response very quickly, building on the processes and networks developed after September 2010. Active participation in cross-sector planning and service delivery resulted in a much improved response and a significantly enhanced profile for mental health and in particular, allied health staff.

This paper is not an academic one focusing on research relating to this disaster. Instead it will outline the response of the CDHB SMHS and the activities/roles staff have undertaken in the psychosocial response since the earthquakes began in September 2010. Protocols developed for the initial deployment of psychologists and other health professionals in disaster scenarios, the challenges faced in implementing a post disaster psychosocial response and plans for the future will be also be discussed.

Introduction

The earthquakes have caused significant damage to the infrastructure and buildings of Christchurch. Tragically 182 lives were lost in the February earthquake, with many more being injured. One of the major causes of damage and emotional distress for people has been the extent of the liquefaction that has

occurred in different parts of the city during the major earthquakes and some of the aftershocks. In lay terms, liquefaction occurs when the pressures and stress in the ground resulting from an earthquake forces a mix of water, sand and soil to flow out of the ground.

There is no doubt that the earthquakes have had a devastating effect on the city and the community but on the other hand there have been many positives that have come out of this tragedy. The magnitude of these events has also forced a 'shake up' – a type of 'liquefaction' - of the boundaries and silos that people have traditionally worked in. This has led to improved communication between key agencies and more collaborative and flexible ways of working than was the case before September 2010.

Immediate Crisis – Initial Response

The September 2010 earthquake caused significant damage and disruption to Christchurch and the Canterbury region. However, for the SMHS, it also provided an unfortunate "dress rehearsal" for the response that was required after the tragic events of 22 February 2011. Immediately after both the September and February earthquakes the SMHS set up an Emergency Operations Centre (under existing protocols) to coordinate and communicate the SMHS response.

The February 2011 earthquake created significant challenges for the SMHS. The central city was isolated and inaccessible due to the 'red zone' cordon. Red zone areas were created and policed by Civil Defence, Police and Military personnel to exclude the public from unsafe areas of the city. Many community services and bases

were either inside the red zone or inaccessible due to safety concerns. Having available the specific disaster related protocols developed after the September earthquake helped facilitate a rapid response.

There were a range of urgent practical issues that had to be dealt with such as, contacting staff and units to check their status, securing buildings (confidential notes, files, diaries etc), relocating staff and where possible essential equipment (e.g. computers, cars). Even on a "business as usual day" it might be expected that such activities may not always run smoothly, however in the disaster scenario of 22 February there were significant logistical issues that had to be dealt with. A key initial issue involved trying to contact staff when phone lines were down and the cellular network was overloaded, but getting up to date staff contact details during a disaster proved extremely challenging.

Across the Canterbury District Health Board Services more than 1000 staff were displaced after the February 2011 earthquake. In the SMHS the following services had to be relocated;

- Anxiety Disorders Unit (ADU)
- Child and Family Specialist Service (Whakatata House)
- Hereford Centre (Adult community rehabilitation services)
- The North, South and East Adult Community Mental Health Teams
- Psychiatric Consultation Service (liaison between mental and physical health services)
- Psychiatric Emergency Service
- Totara House (Early intervention for Psychosis)

All of these services were relocated to shared space with other teams which resulted in severe overcrowding, limited access to key resources (e.g. computers) and – at least initially - a compromised service delivery. The East Adult Community Psychiatric Service is the only service that has been able to move back into its original premises. By January

2012, all other SMHS units remain in temporary premises while other options are sought. The building ADU was housed in was assessed as too unsafe to re enter after the February 2011 earthquake and as a result most of that unit's resources were lost.

Psychosocial Support – Immediate Response

One key thing the SMHS was asked for was to provide input into the Emergency Welfare Centres that were set up for people displaced from their homes. After the September 2010 earthquake there was some debate about whether this was the role of a Secondary Mental Health Services (i.e. SMHS) or whether such input should come from Primary Health Care services or the Non- Government Organisations (NGO) sector. The reality is that in a crisis such as this, these distinctions are irrelevant as demand and capacity issues transcend such boundaries. It was clear that Civil Defence, the Welfare Centre staff and affected people simply needed and wanted SMHS involvement. In disaster situations, the capacity for an immediate and comprehensive (shared) response is needed from key welfare and health organisations. In September 2010 it was a few days before agreement was reached that SMHS staff would provide input to the Welfare Centres. Based on the protocols and links that were established then, SMHS input was immediately sought after the February 2011 earthquake.

Emergency welfare centres

The role of SMHS staff in the Welfare Centres covered a number of areas:

- Consultation to Centre staff about the management of behavioural/psychological issues occurring for people attending the Centres.
- Provision of support and advice to Welfare Centre staff (including Civil Defence personnel, NGO staff and Peer Support workers) who were themselves experiencing exhaustion, stress/distress.

- Being available to provide support and advice to members of public attending the centres who were experiencing distress and anxiety specific to earthquakes.
- Providing advice to and assistance to people (and Welfare Centre staff) with significant distress/anxiety about going back to their homes and reluctant to leave welfare centres.
- Assisting people attending the centres who had pre-existing psychiatric difficulties who presented with symptom exacerbation.
- Assisting with issues arising from the closing down of the Welfare Centres.

Resource manual and schedules

To support SMHS staff who attended the Welfare Centres, a resource manual was compiled by some of our Psychology staff following the September 2010 earthquake. All SMHS staff who provided psycho-social support were issued with copies of this manual. The manual covered the Psychological First Aid Principles published by the National Centre for PTSD (2006). They were also all given a guideline document briefly outlining their role/duties. A key approach taken was of normalising people's response: i.e. that fear, anxiety and general distress are normal responses to the abnormal event.

SMHS staff worked in two shifts (2 staff per shift) seven days a week at each centre. The shifts were either 8.30am – 3.30pm or 2.30 pm – 10.00pm. The overlap time between 2.30pm and 3.30pm allowed for a communication and briefing time with the staff on the next shift. Between 10pm and 8.30am there was a person available on call, to provide advice to Welfare Centre staff if needed. In the time the Welfare Centres operated after both the September and February earthquakes more than 70 SMHS Staff (32 psychologists, and the remainder a mix of social workers, occupational therapists and nurses) were involved

In many cases, staff provided this input despite having to concurrently

deal with difficulties in their own lives resulting from the earthquakes.

Other psychosocial support provided by SMHS – immediate response phase

In addition to providing input into the Welfare Centres the SMHS also responded to various other specific requests for input from Earthquake Commission, Civil Defence and other groups. These included;

- Providing support staff at the Canterbury Television & Pyne Gould Guinness buildings (the collapse of these buildings caused the highest loss of life) where family/whanau/friends of those missing or deceased had gathered during the search of those sites.
- Having staff available for consultation at the briefing and review meetings before and after the House/property Inspection (HI) teams went out to check on people and property.
- Having staff available to provide support for and liaison with staff at the Civil Defence Emergency Operations Centre (EOC).
- Assistance with the coordination of the “welfare staff” who provided support to members of the public at the Earthquake Memorial Service on 18 March 2011. The SMHS and a number of other agencies including the Ministry of Social Development, the Ministry of Education, the Salvation Army, Red Cross, faith based volunteers and others provided staff for this role.
- Making available a small group of senior clinicians for Police liaison / Family support work with families who experienced bereavement related to the February 2011 earthquake. SMHS also provided supervision for this team of workers.
- Staff from the Anxiety Disorders Unit developed and provided a number of education sessions about common psychological and behavioural responses to disasters as well as well as basic coping and self-management strategies.

These were delivered internally across the CDHB as well as to the wider sector.

- Providing support staff for a community children’s Activity Day
- Providing an education session to the staff of local MP’s offices.
- Having a senior Allied Health staff member on the Psychosocial Welfare Sub Committee (now the Canterbury Earthquake Recovery Authority (CERA) Community Well-being Planning Group) that was set up to facilitate a cross sectorial approach to the psychosocial issues facing the Canterbury community after the earthquakes.

Public Awareness

Immediately after the earthquakes another key area of SMHS activity involved educating the public and media about key issues arising from disasters such as this. A major emphasis initially was on education about common psychological and behavioural responses people can have in a traumatic event or disaster. This included information about the impact of disasters on children and adolescents.

Advice was also provided about the evidence base or otherwise of offers of various kinds of support and “trauma” counselling services from both within New Zealand and overseas. CDHB staff also provided regularly updated public health messages, for example related to hygiene and the need to boil water.

Evidence from disasters in other parts of the world indicates that in responding to such events it is important to build on local capacities. (e.g., Hobfoll et al., 2007). It is essential that local expertise is not overlooked when dealing with a disaster response. Local community participation and empowerment – the use of local knowledge, networks and expertise – is an important and key factor in helping communities recover. This is a principle that has guided our planning and response from the beginning and one which we have argued strongly in all relevant local

and national forums focusing on recovery programmes.

Ongoing Psychosocial Recovery Activities in the Longer Term

A number of SMHS staff have been centrally involved in planning for the medium and longer term needs of the Canterbury population. This has included contributing to the establishment of and participating in the Psycho-social Health Response Group set up to coordinate the health response (Primary health, Community & Public health, Planning & Funding, SMHS), as well as ongoing liaison with CERA and various other professional networks and services. These professional networks and services include Psychology and other Health Professional groups, the Charity Hospital (which has provided free counselling to affected members of the community) and the Joint Centre for Disaster Research (Massey University). SMHS staff have also provided support and consultation to staff and the public during ‘door-knocking’ exercises to visit households in the most affected suburbs. SMHS, Relationship Services staff were also involved in the various forums run by CERA and the Recovery Centres that were set up in various parts of the city to meet with homeowners whose properties are identified as unable to be repaired.

A Pamphlet providing key messages on common psychological and behavioural responses and suggestions on how to cope was developed by SMHS staff and delivered to all households.

Specific Earthquake Related Treatment Initiatives

After the September 2010 earthquake planning was already underway in relation to the development and delivery of psychological treatment resources to deal with people presenting with earthquake related distress/symptoms. This process was accelerated after the February 2011 earthquake and the SMHS currently has two specific assessment and treatment services for people experiencing earthquake related psychological and behavioural difficulties. One team focuses on

providing treatment for adults (18 - 65 years) and the other on children and adolescents up to the age of 18 years. The CDHB Psychiatric Service for the Elderly has also set up a specific treatment service for the older adult population (65 years +). These services have links with Primary Health, Community and Non Government Organisation (NGO) agencies which are also providing support and treatment for people with earthquake related distress. A number of CDHB psychology staff have played a central role in developing the treatment protocols for these services and are also involved in delivery of these treatments. A brief overview of these services follows.

SMHS Adult Earthquake Treatment service

This is an outpatient service for people with earthquake related distress. It commenced operation in August 2011 and has funding for the equivalent of 2 full time staff for an initial 12 month period. The staffing mix of this team is as follows: 0.6 staff Full Time Equivalent (FTE) Clinical Psychology, 0.4 FTE Social Work, 1.0

FTE Nursing (coordination). This team is based in the Clinical Research Unit (University of Otago, Christchurch School of Psychological Medicine). Although funded by the CDHB, this team has a strong commitment to researching outcomes. The service provides a mix of both group and individual short term Trauma Focused Cognitive Behaviour Therapy (Hamblen, 2005).

SMHS – Child and Family Service (CAF) Earthquake Response service

This service also has initial funding for a one year period and commenced operating on 1st July 2011. Both group and individual Cognitive Behaviour Therapy (CBT) treatment options are provided. The funding includes the equivalent of 3 full time staff which includes; 2 FTE to provide assessments and consult liaison regarding all referrals, 1FTE split across a number of staff to provide group work. This service provides a CBT informed therapeutic programme including group and individual treatment options for those

aged up to 18 years.

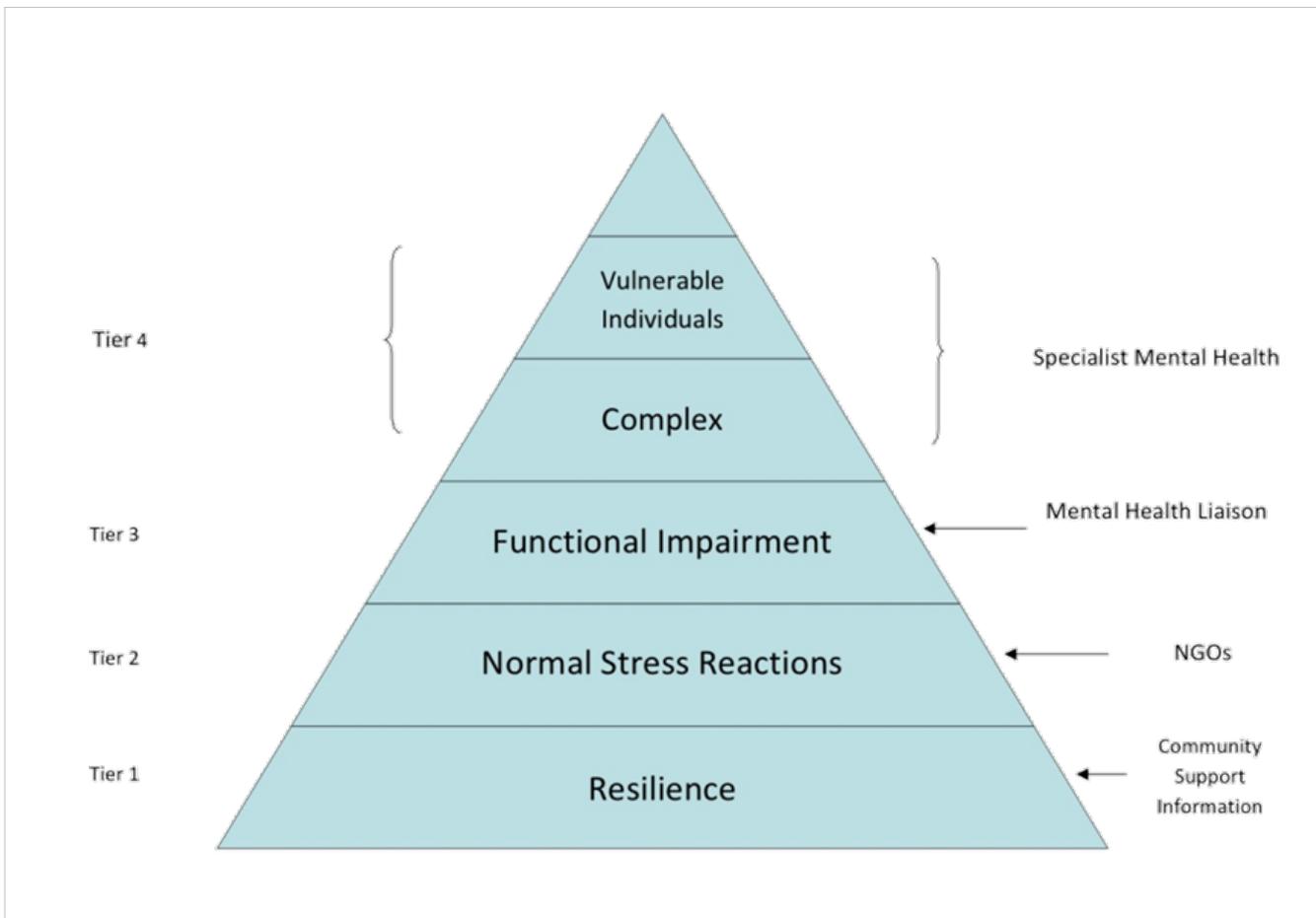
Older Persons Health Post Earthquake Anxiety Service

This service has initial funding for one year which includes the equivalent of funding for 2.2 FTE to provide an earthquake treatment response for adults aged 65 years and over.

CBT based groups and some individual work are provided primarily by clinical psychologists and commenced in September 2011.

Key SMHS staff worked with primary care throughout the process of developing and delivering the psychosocial response to ensure that resources were allocated where needed. In addition to the services outlined above, resources were allocated to primary health services for extended consultations as well as additional staff to meet the demand for assessment and brief counselling.

▼**Figure 1:** Roles in responding to needs across the population.



Intervention Focus

Overall, how the response from the SMHS fits with the wider-sector response can be represented by the following diagram, which is adapted from the Inter-Agency Standing Committee Guidelines on Mental Health and Psychosocial Support in Emergencies (2007).

As the diagram indicates, the majority of people (on Tier 1) are resilient and have the personal resources to deal with a disaster situation via existing family and community supports networks and the provision of relevant information packages, without the need for more specific support or intervention from mental health related organisations.

Many others will be able to cope with some support from welfare and other non government agencies that provide psychosocial support (Tiers 2 and 3). Typically, only a small proportion that will need the kind of specialist services (Tier 4).

SMHS Staff Support

Immediately after the September 2010 and February 2011 earthquakes, a range of supports were put in place for staff. These included:

- Chill Zones: a place where physiotherapy massage, chaplain and refreshments were available
- Special Leave: to enable staff to care for dependents (schools and rest homes closed) and attend home assessments and repair planning
- Employee Assistance Programme (EAP) counselling and Financial Advice Seminars.

Future Planning for Disaster Preparedness

The September 2010 earthquake highlighted the need for an Emergency/Disaster Response Team that can respond immediately in any future disaster situation.

A group of senior SMHS allied health staff began developing a plan

for this after the September earthquake. Unfortunately the February 2011 earthquake occurred before these plans were fully realised.

Planning has now recommenced and it is envisaged that this service will be made up of a small group of SMHS staff who are able to be released from other duties at short notice.

A specific set of protocols and procedures will be developed for the operation of this team, which will include an Orientation, Training and Resource Kit for team members. Specific protocols will be developed to establish links between this team, Civil Defence, the Ministry of Social Development and other key disaster response agencies. In addition a specific training programme will be developed for team members.

Lessons Learned from These Earthquakes

The ongoing events since September 2010 have provided a wealth of learning points for SMHS staff. These events have highlighted the fact that every disaster situation is different and has unique factors specific to the situation. There is not a specific 'textbook' response applicable to all situations and the Canterbury earthquakes clearly have shown us this. The September earthquake was unexpected and to some extent caught the community underprepared. In September 2010 there was significant liquefaction and damage, but no deaths. Unfortunately the situation was very different in February 2011, with not only significant and widespread infrastructure damage, but also a significant injury and death toll.

The response to the disaster by all key agencies has been complicated by the ongoing aftershocks. We have learned that it is important to not only be prepared, but also to have the ability to be flexible in the responses provided. In addition, these events have emphasised the fact that the traditional divisions between key organisations and sectors (such as Health, Government Departments, Disaster Relief Agencies and Social

Service providers) need to be transcended in such situations. Communication and co-ordination between all key agencies is critical and all must work together to shape a functional response. It is important that protocols to facilitate this communication and coordination are planned and in place in advance of such situations, rather than having to be developed reactively as a disaster unfolds.

Summary

The September 2010 earthquake served as a "dress rehearsal" for what was to come in the February 2011 earthquake and as a result the SMHS was able to mobilise a response very quickly, building on the processes and networks developed after September 2010. We have identified the importance of developing and maintaining an Emergency/Disaster Response Team that can respond immediately in any future disaster situation and work is underway on developing this.

The earthquakes have resulted in the traditional barriers between organisations and sectors being shaken and stirred, resulting in improved inter and intra-agency co-ordination and service delivery. Active participation in cross-sector planning and service delivery by SMHS staff has resulted in a much improved response and a significantly enhanced profile for mental health and in particular, allied health staff. Psychologists and other allied health professionals have the knowledge and skills to play a central role in the psychosocial response to disasters.

Acknowledgements

We would like to acknowledge the professionalism, dedication and commitment we have seen in SMHS staff where they have been called on to provide specific earthquake related input and also in carrying on their usual work in often very stressful personal circumstances.

We would also like to acknowledge the courage and resilience shown by the Canterbury community as it has faced the ongoing stress and uncertainty resulting from

the earthquakes and ongoing aftershocks.

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Ross Becker Photography

▲ Roller coaster roads remain, September 2011 — ©2011 Ross Becker