An enhanced primary health care role following psychological trauma: the Christchurch earthquakes

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ABSTRACT

Following the February 2011 earthquake in Christchurch, New Zealand (NZ), the authors participated in counselling local residents, and debriefing and supervising support teams. Indications were that risk for mental health disorders, including Post-Traumatic Stress Disorder (PTSD), may be elevated in residents, and that this risk may continue for some time. Patients may be de-prioritising their mental health issues when these become normalised throughout the city's population. The authors recommend that primary care patients are assessed using a brief, comprehensive tool (for example, the Case-finding and Help Assessment Tool) that targets many health and behavioural issues identified as increasing in the city following the earthquake. Anxiety and mood disorder symptoms may indicate assessment is appropriate to reduce harm arising from increased risk for PTSD. Concern also is raised for primary health care providers who may have experienced the trauma and additionally may be vicariously affected by patients' reported trauma.

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Following the February earthquake in Christchurch, the authors' non-governmental organisation (NGO) provided counselling for local residents, as well as debriefing and supervision for a social and health NGO which organised 'imported' teams of support workers. Teams proactively approached residents in the damaged areas identifying urgent needs, and in the early stages had some access to floating GPs who had volunteered, and these provided help to residents who were unable to access their Primary Health Organisation (PHO).

Sources of continuing psychological trauma

The persistent and uncertain continuation of aftershocks, some large and accompanied by roaring noise and strong jolts, provided an environment of uncertainty, and continued the experience of re-traumatisation for many residents. Residents tended to recall three earthquakes during the previous seven months, rather than two major earthquakes those outside of Christchurch recall. The largest was in September 2010, followed by a Boxing Day series of quakes, and the most destructive in February 2011. Following the September quake there has been an experience of ongoing, sometimes large daily tremors, interspersed with major aftershocks that do not necessarily reduce destructiveness. This appears to have engendered sensitisation to, rather than tolerance of, aftershocks.

In working with residents, as well as information received from debriefing teams, the authors noted several recurring themes that provided an insight into the changed perceptions and needs of the Christchurch people:

- Many people reported trauma and anxiety, describing their escapes and memories of destruction, injuries and death.
- Long periods of anxiety not knowing if family was safe. Phone communication was lost and residents often had long journeys in chaotic conditions to find others, and this remained a future fear.
- Re-traumatisation often occurred during larger aftershocks. Strategies were developed to minimise risk or effects, or unconsciously adopted to escape dysphoria, such as reluc-

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tantly leaving home, increased alcohol use and gambling.
- Low tolerance to traffic movement and similar noises, with resulting fear and automatic stress-induced reactions.
- Fears of returning to the original building occupied during the earthquake if repaired, or of entering multistoried buildings.
- Survivor guilt accompanied by over-work or the avoidance of leisure activities.
- Realisation of vulnerabilities. For many, the Japanese earthquake and tsunami intensified fears and prompted existential thinking.
- Belief in predictions of further large aftershocks resulting in continued feelings of loss of control.
- Grief over losses and fear as the media updated fatalities.
- Isolation and grief as neighbours or family left Christchurch.
- Poor and interrupted sleep as a result of aftershocks.
- Relatively poor diet and reported poor general health that may result from stress, lower self-care, and need for instant gratification.
- Frustrations and stressors with temporary, shared, and/or damaged accommodation. Feeling trapped if options were limited and feeling overwhelmed with decisions, while relating to becoming a 'refugee'.

Many of the above themes were common to each resident, demonstrating or reporting high levels of anxiety, irritability with others, sudden tears, and tiredness.

Primary health care role

PHOs provided immediate, much-needed health care to a large proportion of the population traumatised by the earthquake and its ongoing aftershocks. Since the February earthquake, police, health and social services reported concern at increased levels of anxiety and depression,[1] suicides,[2] alcohol abuse,[3] gambling problems[4] and family abuse.[3]

Many PHO centres were damaged by the earthquake, although by the end of the first week 85% were accessible to patients.[5] Preliminary results of a survey by the Canterbury District Health Board conducted three weeks following the February earthquake identified that almost one in four respondents had sought medical help in the previous week from a doctor, nurse or general practice team, and only 2% of respondents indicated difficulties of accessing that help.[5] No data, however, were provided in the preliminary results for mood or anxiety problems. During a time when mental health stress could be expected to be elevated, the primary presenting or diagnosed conditions were coughs (16.3%), diarrhoea (10.5%), and these were reported as being at the expected rates for the time of year.[5]

From the authors' conversations and counselling sessions with residents, it appeared that although

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Christchurch residents' help seeking from their PHOs may have been higher, they were not seeking help for their mental health issues. Physical injuries may have been perceived as being in greater need, with constant images of injury and recovery of the missing focused on by the media. In addition, whereas anxiety heightens awareness of environment risk, this often comes at a cost of reduced self-awareness. With the high casualty rate and destruction, grief, especially during the initial weeks, was a normal reaction to loss; however, many residents counselled described their primary experience to be ongoing depression, uncertainty and fear.

Higher risk possible for post-traumatic stress

Whereas many patients may experience Acute Stress Disorder for the month following the

trauma, or experience other mental health conditions, not all patients affected by life-threatening events will go on to develop much longer lasting and problematic Post-Traumatic Stress Disorder (PTSD). Research indicates a wide-ranging estimate of 3% to 58% of those exposed to trauma will develop PTSD, whether or not they are affected by predisposing conditions that may raise risk.[6] The severity, proximity to, and duration of the event can override the presence or otherwise of all such predisposing factors,[6] and in the case of the Christchurch earthquakes, the widespread destruction and loss of life, central city high population impact, and ongoing unpredictable aftershocks, may well meet all three risk-raising factors.

PTSD develops over time and, by definition, cannot be diagnosed in the first month following the traumatic event. Evidence for improved outcomes through early intervention in preventing PTSD with traumatised patients, are somewhat mixed. A Cochrane review has indicated that multiple-session psychological interventions with all trauma victims, especially if appropriate symptoms are not evident, may not be effective,[7] while single session debriefing may be ineffective or even detrimental.[8] By contrast, a recent editorial supports the targeting of those trauma victims who are at high risk for PTSD, although acknowledging the difficulty in these individuals.[9] Further support for early intervention comes from a study of children displaying symptoms of traumatic stress found that recognising and managing the symptoms, together with learning coping skills, resulted in reducing the later development of PTSD by 73%.[10]

The Christchurch population had been subjected to a larger, albeit less destructive earthquake six months prior to the February event. Trauma, loss, deprivation, and possibly sensitisation through ongoing aftershocks for almost six months prior to the February earthquake may well meet the most influencing factors for PTSD (severity, proximity, duration).[6]

In the absence of clear guidelines as to who should receive early intervention, a case could well be made that, for the specific high-risk factors occurring in Christchurch, earlier intervention may be appropriate. Pharmacological interventions have been found to be an effective approach to addressing PTSD,[11] and combined pharmacotherapy and psychological therapy is possibly better.[12]

Comprehensive screening

The ongoing stressors in Christchurch suggest the importance of screening all patients. Opportunistically, patients may be seeking help in increased numbers,[5] and a brief, validated tool that case-finds for the identified elevated conditions appears to be serendipitous. The Case-finding and Help Assessment Tool (CHAT), developed for primary health care in NZ, tests for depression, anxiety, alcohol and other drug misuse, family violence, anger, problem gambling, smoking and exercise needs.[13] Even if help is not elected by the patient following a screen positive condition, the health professional can provide information that sows the seed for later help seeking.

Health of the health professional

Further areas of concern may be the health of the primary health care professionals themselves. The authors noted that many health providers they assessed and counselled had experienced traumatic events the day of the February earthquake, yet had since focused on the high needs of their clients or patients. The risk for vicarious trauma is a condition poorly understood of health professionals working with traumatised patients. Because of the vividness of patients' disclosures, the cumulative effects of the patients' trauma transfer to the health professional. Symptoms of PTSD have been identified in health professionals, including doctors,[14] who have not directly experienced the trauma. In the Christchurch situation, health professionals have themselves experienced the earthquakes, if not the specific life-threatening event of the patient.

Increased need for proactive approach

The role of the health professional in what has been described as the most destructive event in NZ to date, appears to be critical. Because patients may be minimising or failing to identify their failing mental health conditions, somatising their dysphoria, or perceiving the needs of others to be

greater, it may be critical for primary care professionals to screen for the range of linked conditions that may affect their patients. Opportunistically addressing these health conditions early will be positive, and ultimately healing, for patients who have been subjected to a destructive event with many ongoing stressors and consequences.

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Hearts Hands Minds:
The cardio-thoracic nurses of Green Lane Hospital

Margaret Horsburgh

Reviewed by **Stewart Eady**, Cardiac Care Manager, Heart Foundation

Hearts Hands Minds walks the reader through the 60+ years of the history of Greenlane Hospital's cardiothoracic surgical unit and looks at a special group of Kiwis that established and maintained an international reputation. This book takes a unique look at these people, their personalities and achievements, the highs and lows of this past era, with a major focus on the role nurses played.

Margaret Horsburgh's research has captured, with the help of a dedicated team of former nurses, this unique part of New Zealand health history. From the opening chapters the reader is drawn into the life of the hospital in such a way that even if the reader hasn't worked there they will still find it very interesting. One can't help but feel proud of their dedication and achievements in the face of enormous obstacles.

Greenlane nurses have left a legacy of professionalism and commitment to excellence; the stories bear witness to this, and the impact they made within the team and the public they came in contact with is still significant today. It also provides a unique insight into how health reforms through the decades impacted nursing and in turn how nursing helped influence some of these changes. This book makes history come alive and is a must for anybody who has had any association to Greenlane Hospital over the years.

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