

# The Omaha System Helps Find Meaning in Despair

J. Kay Poulsen, MBA (dist), BA, Dip Sec Tchg<sup>1</sup> Amy B. Lytton, MS, RN,<sup>2</sup> Karen A. Monsen, PhD, RN,<sup>3</sup> Sara Avery,<sup>4</sup> Ashleigh Peck<sup>5</sup>

<sup>1</sup>Help4U Ltd, Christchurch, NZ, <sup>2</sup>St. Paul-Ramsey County Public Health, <sup>3</sup>University Of Minnesota School of Nursing, Minneapolis, MN, USA,

<sup>4</sup>Massey University, Nursing Programme, Wellington, NZ, <sup>5</sup>CPIT School of Midwifery, Christchurch, NZ

## Using the Omaha System to Document Disaster Recovery Efforts

The Christchurch quake on 2/22/11 provided an opportunity to test the use of the Omaha System to describe problems of health system navigation and health literacy.



### Situation as at 2 April 2011

20 seconds of the most violent ground shaking ever recorded (2xgravity) resulted in:

- 169 identified dead
- 12 unidentified dead

Hundreds suffering crush injuries, limb amputation and mental trauma

10,000 homes to be demolished

- Some suburbs to be levelled

City's sewerage system on the brink of failure

- 2000 portaloos,
- 27,500 chemical toilets
- 400 disposal tanks distributed

Health System losses

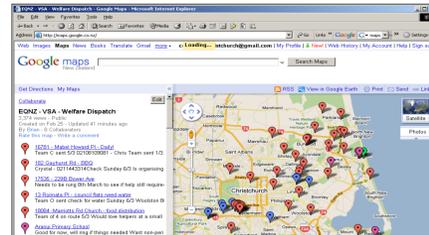
- 600 rest home beds lost
- 100 tertiary hospital beds lost (20% of capacity)
- 128 Central Business District buildings to be demolished
- No power in 40% of Central Business District
- Power network unlikely to meet demand for winter heating
- 3000 permanent job losses in first week

## Navigating Health in a Disaster Zone

**(first 72 hours):** 22 (35%) not for profit / non-government health groups (eg: Cancer Society, Age Concern, MS Society, Foundation of the Blind), were based in the CBD and could not be contacted or had no access to client records.

Disaster recovery organisations (eg: Red Cross) were focused on rescue and victim support; hospitals and medical clinics were evacuating rest homes and high risk patients and establishing welfare centres.

**Response:** Thousands of youth volunteers were discovering significant welfare need as they cleared silt from streets. Liaising with Red Cross and Civil Defence, they used Facebook to source goods and services and Google map technology to rapidly dispatch welfare volunteers.



Help4U was the link to health organisations and used Omaha System to identify problems; describe interventions; deliver health navigation teaching and guidance; and promote health literacy at a local level.

### Case Study

Elderly couple (80 years). No power, water or sewerage. Had seen no one since quake (3 weeks prior). Wife with dementia and husband hearing impaired. Both had mobility issues. No portaloos in the street. Food supplies had been laid out on floor and rationed. Husband was providing supervision for wife. Volunteers supplied 30L of water; fresh fruit and vegetables; canned food, toilet paper and hand sanitiser. Provided agency contact details. Alerted HQ to monitor.



## A Day In The Life:

Student volunteers collected data on welfare requests. The Omaha System was used to help enhance their data gathering, health literacy and navigation. One day of requests to Comfort for Christchurch (a youth volunteer group) is presented here. Each graph displays cases (n=53) and requests (n=211) to reflect multiple welfare needs per case.

### Problems:

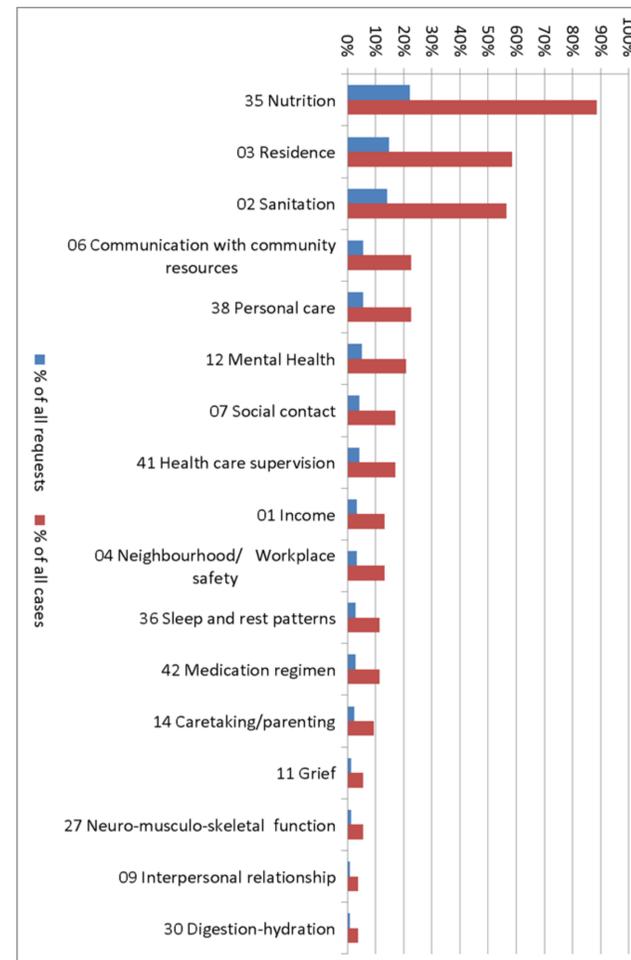
100% of cases had problems in the environmental domain.

58% had problems of residence and

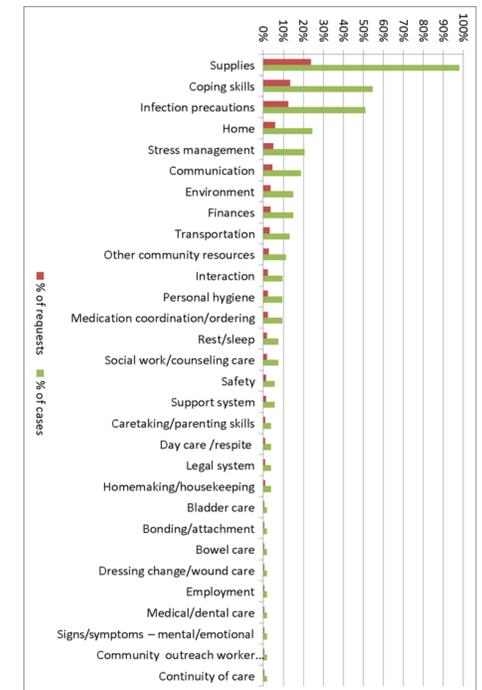
57% with sanitation.

89% of cases had problems with nutrition (no food or water).

Over 20% of cases had clearly identified issues with mental health.



**Interventions:** 98% of cases received supplies (food, water, nappies, clothing, linen, medical consumables). 55% required teaching, guidance and counselling in coping skills and 51% needed guidance in infection precautions. 21% required referral or surveillance for stress management and 15% needed guidance with finances. 9% needed help to access medications, including those already diagnosed with mental illness.



**Conclusions:** Use of the Omaha System enabled Help4U to provide data about the extensive damage and human health needs caused by the Christchurch Quake. The data system developed for the disaster response effort has potential to support recovery efforts for the long term.

