

The impact of trauma and critical care: reflections from a practitioner and a patient

Carey J Denholm and Justin T Denholm

In May 2004, one of us (CJD) was involved in a significant motor vehicle accident, colliding with a truck at 70 kph. Injuries included left-sided rib fractures and flail segment, haemopneumothorax, L4–L5 vertebral body fractures, multiple abrasions and lacerations, and post-traumatic amnesia. As a result, I spent 2 weeks in intensive care units and another month as an inpatient in a tertiary and then a regional hospital.

This article has arisen from my reflections — as a patient, practising psychologist and university Dean — on the short- and long-term effects of these events. Although it is presented as a first-person account, it incorporates observations and perspectives from a medical practitioner (my son, JTD). We hope that this shared perspective will provide critical care practitioners with additional insights, particularly into the psychological impact of major trauma and hospital care.

The accident and treatment

I recall that I was driving to deliver a lecture to doctoral candidates when my university station wagon collided head-on with a large truck. My memory of this event includes the noise of impact, the vehicle rising in the air and dropping to the road, and of being surrounded by air bags.

Initially transported via ambulance to a regional hospital with a 12-bed ICU, I was subsequently transferred interstate for specialist critical care and spinal surgical management. During the admission, I underwent posterior fixation of the lumbar spine and several thoracotomies for drainage of a haemopneumothorax and repair of a diaphragmatic perforation. Because of the chest trauma and a past history of lung disease (bronchiectatic lung disease, requiring intermittent therapy with oral corticosteroids and antibiotics), I required a tracheostomy for ventilatory weaning. In total, I spent 14 days in ICUs, another 20 days as a tertiary hospital inpatient, and a further 10 days in a regional hospital, where I had several operations to remove glass from my hands. I continued regular physiotherapy, and 3 years after the accident completed an outpatient rehabilitation program. During rehabilitation, I underwent C4–C5 anterior cervical fusion.

Short-term impact

The impact of the accident on my body had a significant effect psychologically. Prolonged immobility and the effect of spinal surgery resulted in a 16 kg weight loss and significant muscle wasting. I recall being unprepared for the shock of the first

sight of my body following my first shower 16 days after the accident, of the major changes in body mass and muscles, and my distorted posture and inability to hold my own weight. I was embarrassed that my wife had to witness such changes, but she nevertheless remained a constant source of hope and courage.

During hospitalisation and recovery, I experienced a range of emotions: shock, grief, guilt, fear, vulnerability, dependence, isolation, depersonalisation and the urge to escape. I also experienced lethargy, sleep deprivation, some “flashbacks” of the accident, and both acute and prolonged pain and an acute sensitivity to touch. I came to predict which staff might have difficulty inserting lines or applying medications. A need to mentally distance myself from the impact of the required procedures was coupled with difficulty accepting my total dependence on staff for basic needs, for which I had little option. In addition, I found the sheer number of staff I encountered each day, including doctors, surgeons, physiotherapists, nurses, dietitians and pharmacists, to be overwhelming. While I looked forward to nursing care from very skilled and competent staff with whom I became familiar, each shift change brought with it uncertainties about who would look after me and what they would be like.

A combination of injury, medications and unfamiliar surroundings meant that I found it difficult to follow medical conversations and, particularly, to understand the reason for many of the procedures required. Grand rounds became an opportunity for me to recover some level of intellectual conversation and status, and although my input was not well received at times by senior clinicians, it did allow me to regain a small sense of personal control. Unfortunately, impairment of my short-term memory meant I often forgot previous conversations, and needed to be reminded by my family that things were going according to plan.

Before the accident, I had been actively involved in senior academic affairs. Afterwards, I had little short-term memory, even for personal letters and cards, let alone medical information and intended treatment. This meant I was largely unable to undertake sustained reading and concentration for about 4 months after the accident. During recovery, I increasingly began to ruminate about my university role, tasks that had been left undone and concerns about my future employment.

Some seemingly small incidents loom large in my memory of intensive care. I remember beginning to choke on two occasions during the night and being unable to reach my call button, the prolonged and at times overwhelming pain from

the injuries and procedures, of being completely overwhelmed and unable to face the next procedure, of physical exhaustion from postural drainage and chest physiotherapy, and resorting to counting down the time for the next dreaded session. I also recall the calming voice, careful pace and reassurance of the head of the ICU, the warm and gentle washing of my body and wounds, and the constant vigilance and reassurance of family members.

About Day 3 of hospitalisation, I made a conscious decision to try to remain positive, to smile at staff and to mouth "thank you" frequently. In terms of positive coping, I also decided to tell nursing staff a joke every day, and to ask questions of medical staff about my treatment and prognosis. My son tells me that my jokes were often risqué, which I can only blame on the effects of sedation and analgesia! However, these strategies served to promote adaptive behaviour, through humour and both a real and a perceived sense of control, and helped mitigate the impact of prolonged pain and uncertainty.

I recall an overwhelming sense of hopelessness when attempting to walk, and of failure to meet staff expectations concerning my efforts to cough. After ICU discharge, I was instructed to maintain a regular level of self-administered morphine, but found it hard to comply because of my desire to learn to cope without morphine, and to increase my own coping resources. I recall being wheeled outside by my wife on Day 18 and, even though I was in a major capital city where the air was not pristine, feeling exhilarated by the wind in my face and the temporary escape from the daily regimen.

Finally, three additional hospital-based practitioners each played important roles during this time. Social workers helped my family deal with the manifold paperwork and find accommodation as interstate visitors. The psychologist supported me and my family to work through our emotions, grief and expectations, and several pastoral care workers offered prayer and readings from scripture.

Long-term impact

I now feel that I have arrived at a point in my recovery where I am able to reflect on the entire experience and to describe a number of lasting impacts. At the outset, trauma of this type has a myriad of both large and subtle impacts that have a ripple effect beyond one's family to the wider community. Over the first 2 years after the accident, I found two dominant psychological reactions, which ebbed and flowed. The first was the persistent uncertainty about outcomes: what could be expected or predicted from interventions, surgery and rehabilitation, and of future capacity? I sought out views from several experienced physiotherapists, my respiratory physician and a general surgeon, began to read widely about my injuries and prognosis, and attempted to "push" rehabilitation, with higher goals than had been set. For example, during hydrotherapy I extended times and numbers of rotations by 10%,

and set myself tasks to repeat the exercises when possible outside sessions.

The second reaction I have termed "fragility"; it manifest as an increased sensitivity to criticism, a lack of confidence in decision-making and a need to conduct multiple checks on written feedback and decisions, coupled with an increase in internalised anxiety. This reaction was reinforced daily by phone calls, letters and conversations about the accident, my progress and well-being — all serving to ensure that I remained fragile and constantly identified as a patient.

During hospitalisation and after discharge, a great deal of family conversation focused on my progress and prognosis. Different roles emerged from each (and extended) family member, resulting in a closer family unit. I have noted an increase in positive touch and reassurance since this time, and all family members have learned a great deal about the new and supportive roles they were able to play.

After hospitalisation, I did not exhibit signs of post-traumatic stress or other sequelae such as flashbacks, anxiety when driving or prolonged mood disturbance. I do retain some light visceral reactions when informed of the trauma of others, and always need to process cognitively how I walk and maintain postural balance. Each day means coming to terms with physical limitations (eg, the inability to run, altered sensation in the left foot and reduced lung capacity) and the necessity of ongoing treatment.

Conclusions

The process of my recovery from motor vehicle trauma will never be complete. Preparing this article has helped me in the process of understanding the pain, suffering and uncertainty that accompany trauma for patients and their families, and that such events are complex and last a lifetime. This event has resulted in greater urgency to complete things and a need to resolve the paradox of being restless to rediscover what it means to be at peace. While a number of activities and enjoyments have been removed from my daily life, I have discovered new activities and tasks, including mentoring, supporting and encouraging those who need it. I consider every day now a gift, and reflecting on my story evokes a strong sense of gratitude to the critical care teams who helped me be where I am today. My thanks to all that you do and all that you are in our hospital and health care system.

Author details

Carey J Denholm, Adjunct Professor¹

Justin T Denholm, Research Registrar²

1 Conservatorium of Music, University of Tasmania, Hobart, TAS.

2 Victorian Infectious Diseases Service, Royal Melbourne Hospital, Melbourne, VIC.

Correspondence: Carey.Denholm@utas.edu.au

□