

## Sigma's 29th International Nursing Research Congress

### Experiences of Significant Others of ICU Patients With Severe Burns

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Globally severe burn injury is responsible for an estimated 265,000 deaths annually. Additionally, surviving patients can experience lifetime disability and decreased life expectancy related to the burn injury (Henschke, Lee, & Delany, 2016). Annually in Australia, 200,000 people sustain a burn injury, with an annual cost of \$150 million to the community (Fiona Wood Foundation, 2017). This equates to \$2000 per patient each day for specialised burns treatment, primarily for those with severe burn injury who face high rates of morbidity and mortality (Fiona Wood Foundation, 2017). The cost of acute health care for patients with severe burns in Australia is estimated at only 20% of the overall lifetime financial burden suffered by the patient and their family, as a result of the burn injury (Cleland et al., 2016).

Severe burn injury remains difficult to define as there are many factors influencing the severity of the burn injury on the patient. These factors include the location and depth of the burn, percentage of total body surface area burnt, and individual factors, such as age and pre-burn health status (Brusselaers, Monstrey, Vogelaers, Hoste, & Blot, 2010). Broadly, severe burns may be defined as burns which require treatment at a specialised burns centre and/or an Intensive Care Unit (ICU) (Brusselaers et al., 2010). A review of the Burns Registry of Australia and New Zealand revealed from July 2010-June 2014, there were 7184 individual adult admissions to burns units in Australia and New Zealand, and 14.5% (1042) of these required ICU admission (Cleland et al., 2016).

Apart from the initial burn injury, there are many other potential threats to survival which make the burns patient's prognosis uncertain (Cleland et al., 2016). These patients also have high mortality rates associated with complications such as sepsis, shock, and multi-organ failure (MOF) (Bloemsmas, Dokter, Boxma, & Oen, 2008; Metaxa & Lavrentieva, 2015). However it is not just the physical impact of burns that requires consideration, the injury can also influence a person's sense of psychological well-being.

Approximately one third of patients who survive severe burns injury, experience various long-term psychological problems such as post-traumatic stress disorder (PTSD), depression and anxiety (El hamaoui, Yaalaoui, Chihabeddine, Boukind, & Mossaoui, 2011). While researchers have investigated the psychological impact of burns on patients (McLean et al., 2017), the patient's significant others have only been referred to in terms of their influence on the patient's recovery, rather than exploring their own experiences (Backstrom, Ekselius, Gerdin, & Willebrand, 2013; Lawrence & Fauerbach, 2003; Sundara, 2011; Yu & Dimsdale, 1999; Zhai, Liu, Wu, & Jiang, 2010).

Due to the sudden and unexpected nature of the trauma, significant others of patients with severe burns are unprepared for this traumatic life threatening event (Metaxa & Lavrentieva, 2015). The significant others may be first-hand witnesses to the traumatic event and are likely to witness the intensive and painful treatment regime and recovery process (Metaxa & Lavrentieva, 2015). As a result of these events happening to their loved one, significant others are thought to carry an increased risk of mental health concerns such as PTSD and depression (Anderson, Arnold, Angus, & Bryce, 2008; Cameron et al., 2016; Pochard et al., 2005).

In a quantitative study by Cameron et al. (2016) of 280 significant others of ICU patients, 67% of participants experienced depressive symptoms. These included a sense of constant burden and inability to emotionally cope in the initial phases of the ICU admission. Although this study reported ICU patients in general, it can be surmised that depressive symptoms amongst significant others of burns ICU patients may be higher. These significant others cope with extra stressors; typically the suddenness and unpredictability of the burn injury, and the younger age of the patient (Metaxa & Lavrentieva, 2015). Further, patients with severe burns often have the added burden of complex mental health issues, previous trauma, drug and alcohol dependence, which may have contributed to the burn injury (McLean et al., 2017). Considering these additional factors, greater support from significant others to patients with burns injury is required. The patient's pre-burn ability to cope may be compromised, greatly increasing their risk for PTSD and depressive symptoms post-burn (McLean et al., 2017).

### **Complexities of self-inflicted burn injury**

In an Australian retrospective quantitative study which reviewed ICU data over a five year period, Varley, Pilcher, Butt, and Cameron (2012) found that when severe burn injury is self-inflicted, the psychological impact, and threat to survival become greater. Self-inflicted burn injury makes up 4% of the total burns hospital admissions internationally. This remains a significant issue, as patients with self-inflicted burns, are often the most severely burned, therefore requiring prolonged ICU and longer overall hospital admissions (Caine, Tan, Barnes, & Dziewulski, 2016). Furthermore, self-inflicted injury resulted in double the death rates compared to all other ICU patients (Varley et al., 2012).

While patients who present with self-inflicted burns often have a history of complex mental health and psychosocial issues, they often have strained social and familial relationships, meaning they lack people available to advocate and support them through the traumatic ICU burns process (Varley et al., 2012). This may lead to overburdening of more distant family and friends, who feel unprepared to act as a patient advocate or support person. At this time of immense stress and trauma, the support provided by significant others has been found to be a key predictor in the psychological well-being and long-term mental health of the burns patient (He, Zhou, Zhao, Zhang, & Guan, 2014). While emotional support from significant others is frequently identified in the literature, it is interesting to note the paucity of research focussing on the experiences of these significant others at this critical time, when they are experiencing personal and vicarious trauma, and are called upon to provide emotional support to another.

### **What we know about family experiences**

Previous studies that have focussed on significant others include a recent Australian study that explored the experiences of patients with burns and their families (Gullick, Taggart, Johnston, & Ko, 2014). However the focus of this study was on the entire burn experience, from initial burn and admission into ICU, ward based care in the Burns unit and outpatient rehabilitation. Further the study was conducted after patients were discharged home (Gullick et al., 2014). While this study provided valuable insights and an overall perspective of the burn experience, it was a retrospective account of experiences and thus did not specifically explore the experience of families in the Intensive Care context, when the patient is critically ill. Further, while much of the research nationally and internationally explores patients' burns experiences (El hamaoui et al., 2011; Gullick et al., 2014; Lawrence & Fauerbach, 2003; McLean et al., 2017; Moi & Gjengedal, 2014; Yu & Dimsdale, 1999), Gullick et al. (2014) found that many patients did not remember the early phases of their hospitalisation, and were often unable to recall the Intensive Care experience. Therefore, conducting research exploring the experiences of significant others of patients with burns in the ICU would not only provide valuable information about their experiences during this critical phase, but would also provide information which could augment the experience from the patient's perspective.

### **Aim of the Literature Review**

The aim of the literature review was to identify and critically examine contemporary research related to significant others' experiences of having an adult significant other with severe burns in an ICU setting.

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**Title:**

Experiences of Significant Others of ICU Patients With Severe Burns

**Keywords:**

Intensive Care Unit (ICU), Severe burn. and Significant Other (SO)

**References:**

- Anderson, W. G., Arnold, R. M., Angus, D. C., & Bryce, C. L. (2008). Posttraumatic stress and complicated grief in family members of patients in the Intensive Care Unit. *Journal of General Internal Medicine, 23*(11), 1871-1876.
- Backstrom, J., Ekselius, L., Gerdin, B., & Willebrand, M. (2013). Prediction of psychological symptoms in family members of patients with burns 1 year after injury. *Journal of Advanced Nursing, 69*, 384-393.
- Bloemsma, G. C., Dokter, J., Boxma, H., & Oen, I. M. (2008). Mortality and causes of death in a burn centre. *Burns, 34*(8), 1103-1107.
- Brusselsaers, N., Monstrey, S., Vogelaers, D., Hoste, E., & Blot, S. (2010). Severe burn injury in Europe: A systematic review of the incidence, etiology, morbidity and mortality. *Critical Care*. doi: 10.1186/cc9300
- Caine, P. L., Tan, A., Barnes, D., & Dziewulski, P. (2016). Self-inflicted burns: A 10 year review and comparison to national guidelines. *Burns, 42*(1), 215-221.
- Cameron, J. I., Chu, L. M., Matte, A., Tomlinson, G., Chan, L., Thomas, C., . . . Meggison, H. (2016). One-year outcomes in caregivers of critically ill patients. *The New England Journal of Medicine, 374*(19), 1831-1841.
- Cleland, H., Greenwood, J. E., Wood, F. M., Read, D. J., Wong She, R., Maitz, P., . . . Gabbe, B. J. (2016). The Burns Registry of Australia and New Zealand: Progressing the evidence base for burn care. *Medical Journal of Australia, 204*(5).
- El hamaoui, Y., Yaalaoui, S., Chihabeddine, K., Boukind, E., & Mossaoui, D. (2011). Post-traumatic stress disorder in burned patients. . *Burns, 28*(1), 647-650.
- Fiona Wood Foundation. (2017). Current statistics. from [www.fionawoodfoundation.com/our-challenge/current-statistics/](http://www.fionawoodfoundation.com/our-challenge/current-statistics/)
- Gullick, J. G., Taggart, S. B., Johnston, R. A., & Ko, N. (2014). The trauma bubble: Patient and family experience of serious burn injury. *Journal of Burn Care and Research, 35*(6), 413-427.

He, F., Zhou, Q., Zhao, Z., Zhang, Y., & Guan, H. (2014). Effect of perceived social support and dispositional optimism on the depression of burn patients. *Journal of Health Psychology*. doi: 10.1177/1359105314546776.

Henschke, A., Lee, R., & Delany, A. (2016). Burns management in ICU: Quality of the evidence, A systematic review. *Burns*, 42, 1173-1182.

Lawrence, J., & Fauerbach, J. (2003). Personality, coping, chronic stress, social support and PTSD symptoms among adult burn survivors: A path analysis. *Journal of Burn Care Rehabilitation*, 24(1), 63-72.

McLean, L., Chen, R., Kwiet, J., Streimer, J., Vandervord, J., & Kornhaber, R. (2017). A clinical update on post-traumatic stress disorders in burn injury survivors. *Australasian Psychiatry*. doi: DOI: 10.1177/1039856217700285

Metaxa, V., & Lavrentieva, A. (2015). End-of-life decisions in Burn Intensive Care Units - An International survey. *Burns*, 41, 53-57.

Moi, A. L., & Gjengedal, E. (2014). The lived experience of relationships after major burn injury. *Journal of Clinical Nursing*, 23, 2323–2331.

Pochard, F., Darmon, M., Fassier, T., Bollaert, P., Cheval, C., Coloigner, M., . . . Azoulay, E. (2005). Symptoms of anxiety and depression in family members of intensive care unit patients before discharge or death. A prospective multicenter study. *Journal of Critical Care*, 20(1), 90-96.

Sundara, D. C. (2011). A review of issues and concerns of family members of adult burn survivors. *Journal of Burn Care and Research*, 32, 349-357.

Varley, J., Pilcher, D., Butt, W., & Cameron, P. (2012). Self harm is an independent predictor of mortality in trauma and burns patients admitted to ICU. *Injury. International Journal of the Care of the Injured*, 43, 1562-1565.

Yu, B., & Dimsdale, J. (1999). Posttraumatic stress disorder in patients with burn injuries. *Journal of Burn Care Rehabilitation*, 20(1), 426-433.

Zhai, J., Liu, X., Wu, J., & Jiang, H. (2010). What does posttraumatic growth mean to Chinese burns patients: A phenomenological study. *Journal of Burn Care and Research*, 31(3), 433-440.

### **Abstract Summary:**

The literature review outlines current knowledge of experiences of family members of patients with severe burns in the ICU setting. The literature asserts Significant Others have a substantial impact on patient survival rates and psychological well-being, however the experiences of the Significant Other in these situations has not been investigated.

### **Content Outline:**

The learner will be able to explain the importance of the Significant Other for the patient with severe burn injury in the ICU.

The learner will be able to identify that there is a gap in the literature in terms of understanding the experiences of Significant Others.

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