

Burn Conference: Biopsychosocial Context of Burn Injuries

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*DOC DISCLAIMER

Objectives

- ❖ Objective 1: Increased understanding and awareness for the burn patient's key psychosocial background factors impacting their response to complex burn injury.
- ❖ Objective 2: Improved appreciation for the value of BioPsychoSocial factors in predicting Health Related Quality of Life outcome.
- ❖ Objective 3: Increased appreciation for the impact on caregivers of providing specialized burn and trauma care.

A Burn That Keeps Hurting

- High rates of anxiety, depression, and trauma/stressor related disorders are linked to burn injuries:
 - Initial traumatic experience
 - Severe pain of treatments
 - Multiple surgeries
 - Long rehabilitation
 - Bodily disfigurement
- Trauma symptoms may develop long after the burn injury occurs.

A Burn That Keeps Hurting – W.B.

In 1967, I was severely burned on my upper body and face ... The priest gave me the last rites.

I was in the hospital for 16 weeks undergoing the most painful treatments you can ever imagine. The dressing changes were excruciating. I needed multiple skin grafts.

At one point, I just couldn't take it anymore. The nurse had left the room for a moment, and I ran to the window intending to jump out. The nurse came back in and grabbed me just in time.

My life was hard for the next 30 years. I had more than 40 surgeries.

A Burn That Keeps Hurting – W.B.

Finally, in 1997, I was referred to a psychiatrist ... I was on the verge of committing suicide. It was mostly because I was **never really able to work after my accident**, and I had **constant anxiety attacks**.

I went to counseling, stopped drinking and smoking, and started antidepressant medication. Then, everything changed. It was like being born into another life.—W.B.

Pre-Injury: David

- ❖ Male, Age 45, Married to Amanda, nurse and paramedic
- ❖ Flight nurse – 20 yrs, 60K per year, “something I wanted to be a part of”
- ❖ Previously ski patrol avalanche technician and ICU nurse
- ❖ “Had arms like bazookas from rowing his 22 foot raft down the Grand Canyon”
- ❖ “...hunter friends would call when needed to pack out big game from wilderness”.

July 3, 2015, 1:30 PM

- ❖ Flight for Life Helicopter, Frisco, CO short flight west to Gypsum, CO
- ❖ “... ejected and landed next to fuselage ... fuel gushed from the ruptured tank.”
- ❖ “I just remember being on that board, holding my arms up, watching the skin slough off my hands” ... “Tell *Amanda* I love her.”
- ❖ TBSA 90%+; 10% chance of survival

David

- ❖ Compartment syndrome
- ❖ Kidney failure and subsequent transplant
- ❖ Septic shock
- ❖ Internal bleeding
- ❖ Pneumonia

David

- ❖ Skin harvesting: scalp X 5, scrotum X 8
- ❖ Extreme Weight Loss - 180 lbs. to 89 lbs.
- ❖ 51 major surgeries
- ❖ Learned to eat using a 2 foot spoon
- ❖ Discharged: August 2, 2016
 - ❖ Date of injury: July 3, 2015

Objective 1: Psychosocial background factors impacting their response to complex burn injury.

❖ BioPsychoSocial Factors

❖ Immediate Behavioral Health Needs

- ❖ Comfort & consolation

- ❖ Emotional support, reassurance

❖ Bio / Medical Factors

- ❖ Complexity of burn, medical stabilization

- ❖ Pre-morbid health status & lifestyle risks and buffers

Objective 1: Psychosocial background factors impacting their response to complex burn injury.

❖ Psychological Factors

- ❖ Pre-morbid Behavioral Health risks and buffers, Trauma history
- ❖ Acute stress reaction
- ❖ Multi-disciplinary consultation for acute symptom management

Objective 1: Psychosocial background factors impacting their response to complex burn injury.

❖ Social Factors – Pre-morbid Social functioning risks and buffers

❖ “The Stuff of Life”

❖ Faith

❖ Family

❖ Friends

❖ Vocation / Job / Hobbies

❖ Community

Objective 2: BioPsychoSocial factors predicting Health Related Quality of Life outcome.

❖ Bio

- ❖ Burn Severity – (%TBSA, Length of hospital stay, Body area affected, Surgeries, Onset of Chronic Pain)

❖ Psych

- ❖ Psychological impact of injury – Depression, PTSD
- ❖ Avoidant Coping Style
- ❖ Neuroticism – trait like autonomic readiness to respond to events with negative emotion

❖ Social

- ❖ Perceived Emotional & Social support
- ❖ Unemployment

Post Discharge: David, Age 48

- ❖ 2 inches shorter; Life expectancy reduced from 79 to 64
- ❖ Open wounds on right Achilles and left shin
- ❖ Can't sit still for long before skin tightens & tying shoes takes time
- ❖ An advocate for helicopter fuel tank safety, congressional testimony
- ❖ "He doesn't obsess about his plight or dwell on his fate."
- ❖ He ice skated again in June and is able to hike, although he can't be exposed to the sun. Would like to ski again.
- ❖ After living in a one-bedroom apartment near University Hospital for two years, he and Amanda are returning home.

Objective 3: Impact on caregivers of providing specialized burn and trauma care.

- ❖ Highly rewarding and highly stressful specialty
- ❖ Continual exposure to traumatic events and acute / critical care challenges
 - ❖ “It hurts a lot to be around a lot of hurt.”
- ❖ Long-Term complex wound care
- ❖ Life-Long rehabilitation, chronic illness
- ❖ Significantly elevated risk for developing Compassion Fatigue (Burnout & Secondary Trauma), depression, relationship strain

Review

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