The relation between burn and depression, anxiety, self-image and social support

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Article History: Received: 21.06.2023 **Revised:**04.07.2023 **Accepted:** 16.07.2023

Abstract:
The adverse consequences of burn injuries include pain and psychological distress, which show bidirectional associations. However, much of the existing research has relied on global measures of distress that do not separate distinct symptoms of anxiety and depression.

Keywords: burn and depression, anxiety, self-image.

DOI: 10.53555/ecb/2023.12.1181

Introduction:

A severe burn injury is a major life event that can dramatically disrupt a person's life. The traumatic nature of the event, the long hospitalization and co-occurring high pain intensity, and the suddenly changed appearance can have a profound impact on those affected and their psychological health ***(1).***

Along with medical advances, more people with severe burns survive their injury and live with scars in a society where a high premium is placed on physical appearance and attractiveness. Scars resulting from burns can have a conspicuous look and may capture attention from the environment. When scars are hypertrophic, they are typically firm, raised, red, and have a rough surface ***(2).*** Hypertrophic scars can be difficult to conceal when they are located at visible body parts. Also, scars in less visible areas can pose a burden on someone's life in specific situations such as the swimming pool, or when the weather is warm and more revealing clothing is indicated at that time ***(3).***

The primary risk factors observed among major burn survivors were broadly discussed in literature. Studies focus mostly on PTSD symptoms but also on depression and anxiety. The factors considered as being the most likely to predict a burn survivor's psychological evolution do not include burn severity indicators (such as total body surface area burned and duration of the hospital stay) ***(4).***

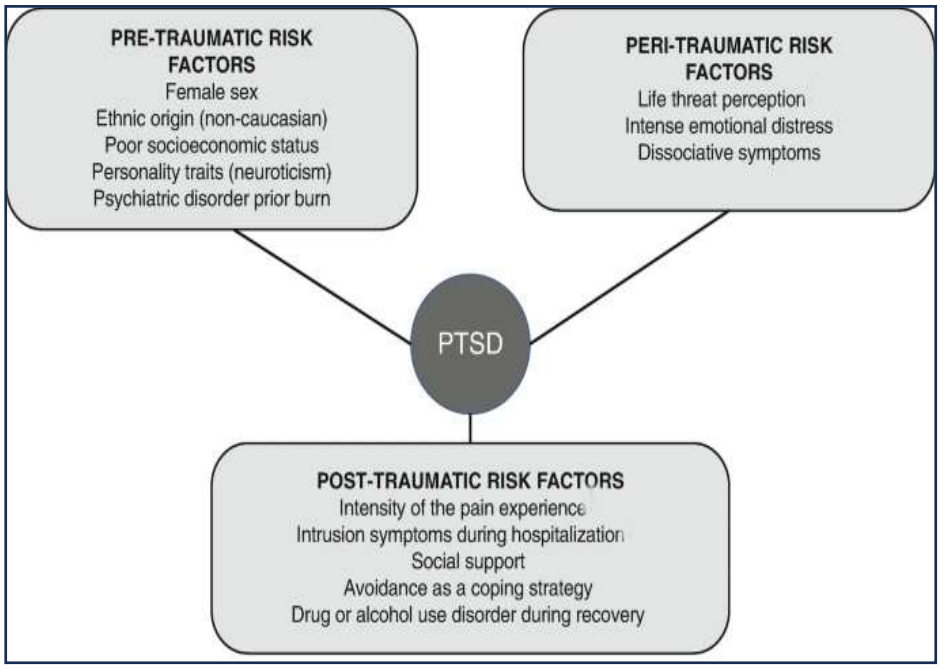

Figure (1): Factors associated with an increased risk of developing PTSD in burn survivors ***(4).***

These findings underscore personal characteristics such as gender and personality, the pain experienced and factors that play a role in one's ability to adapt to the event (e.g., mental problems, social support, adjustment styles). Although few protective factors have been identified thus far, a more beneficial element was observed in patients with a stable social network ***(1).***

Conversely, a "negative" social support system appears to be closely linked to more severe post-traumatic symptoms. Problems

getting used to changes in one's appearance and burn scars has recently been identified as another predictor of PTSD ***(4).***

Twenty percent of people who have suffered serious burns may develop PTSD later in life, according to studies. Nightmares, unsettling thoughts, anguish, avoiding situations, poor sleep, and flashbacks are all examples of these disturbing symptoms***.(5)***

According to research by ***(6)***, 69 percent of burn patients suffer from post-traumatic stress disorder. Severe scarring due to burn, female gender, importance of burn area of the body, depressed behaviours, low level of resilience, and lack of social support have all been linked to increased risk and severity of post-traumatic stress disorder. People who receive emotional support and palliation have lower chances to suffer from PTSD.

Burn and depression:

Traumatically injured and medically ill patients have higher rates of depression than the general population. Burn survivors, in particular, may be at increased risk, due to impaired or loss of functioning, changes in physical appearance, difficulty managing pain, or time away from loved ones due to extended hospitalization and physical rehabilitation ***(7).***

Several studies have found a depression rate of 30–35% among burn patients during their hospitalization using validated questionnaires, and some other studies report higher prevalence, particularly following discharge ***(7).***

Burn and anxiety:

Generalized anxiety disorder (GAD) entails the presence of excessive anxiety and worry, is experienced as challenging to control, and is accompanied by physical or cognitive symptoms. GAD was also found to occur in about 10% of burn survivors after 1 year ***(8).***

This implicates that over time, the majority of people involved in a burn injury appear to adjust well and they will recover from initial high stress and depressive symptoms, but a substantial subgroup will have long-term problems ***(1).***

Anxiety is a common response in burn recovery and to the treatments necessary to heal burned tissue. Anxiety is often experienced in conjunction with the physical trauma and sequalae of the burn, such as with pain and itching. The origin of anxiety may also be related to the trauma itself; therefore, it is important to understand the nature and source of the symptoms and tailor treatment accordingly ***(8).***

Depending on the circumstances related to the injury, burn survivors are at risk of developing acute stress syndrome and post-traumatic stress disorder (PTSD), with symptoms including intrusive memories, nightmares, avoiding thoughts and reminders of the event, numbing or dissociating, hyperarousal, and irritability ***(3).***

As per the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), 10% of severe burn survivors meet criteria for acute stress disorder. Nearly half of the individuals diagnosed with PTSD initially present with acute stress disorder, indicating the need to assess trauma-related psychopathology soon after the injury and post-hospitalization ***(3).***

Burn and self-image:

A major burn injury can result in considerable damage to skin integrity and, consequently, lead to hypertrophic scarring. Deep burns can lead to impaired functioning that can result in loss of functionally and cosmetically important body parts ***(9).***

Disfigurement of socially visible areas (e.g., face) and 'hidden' areas (e.g., genitalia) and body image dissatisfaction have been shown to be related to the development and maintenance of psychological distress and lower self-esteem after burn injury ***(7).***

Living with scars may become even more complicated in the current society. Professionals and academics are concerned about the changing notions of normality related to appearance and the increasing demands of beauty. Pictures on social media are manipulated to present persons in the best possible way ***(10).***

Body image and the perception of bodies are changing and result in increasing engagement in beauty practices that are justified by the new concept of normality. Unsurprisingly, living in a world that values beauty can be challenging for those with a visible difference. It can be particularly challenging for the individual himself or herself when there is a high personal standard placed on beauty ***(9).***

Also, society may be less acceptant toward those with a visible difference. Therefore, even minor scarring may increase the call for plastic surgery and cosmetic interventions. Underlying psychological problems may therefore be a point of attention ***(8).***

People sustaining a burn injury can be faced with noticeable visible differences resulting from large wounds that lead to scarring. Besides an altered appearance caused by these scars, functional limitations can occur if they are located across joints ***(1).***

Both the visible and functional characteristics can diminish satisfaction with appearance and can cause negative self-perceptions and difficulties with social interactions that place people at risk to develop depression and (social) anxiety disorders. These psychological problems may be debilitating to daily functioning in key areas of living such as occupational functioning ***(10).***

Important psychological concepts such as self-esteem and body-esteem can be damaged when a person is forced to live with visible differences. Self-esteem is a generic cognitive representation of the self. It is a multidimensional concept comprising the view of the person on the different abilities and characteristics ***(2).***

It influences how external information is processed, for example remarks or looks from other people. Body-esteem refers to the evaluation of one's own body and can be viewed as a part of self-esteem. After acquired disfigurement, there is a change in body-esteem that a person needs to adjust to ***(9).***

It is reasonable to expect that persons with more severe scarring have greater difficulty integrating the scars in daily life than a person with minor scarring. But objective characteristics such as severity of the burn injury in terms of body area affected, the number of surgeries needed, or the number of affected body parts are only modestly related to psychological well-being, indicating that psychological factors may be more important ***(3).***

One such factor, importance of appearance, showed to moderate the relationship between severity characteristics and body-esteem. This indicates that for those who attach little value to their appearance, scars have a lower impact on their body-esteem. For people who highly value appearance, scars negatively affect their body-esteem ***(7).***

After a burn injury, when wounds are healing and scars start to develop, one has to adjust to this new situation in which appearance has changed. There are two perspectives that have a mutual influence: the individual perspective and the social perspective. The first refers to how people look at themselves and the latter perspective entails the social perspective **(8).**

Scars can elicit negative reactions from the environment. This is well described after burns. Feelings of stigmatization is one of the documented social problems of living with scars. This feeling may result from reactions from other people such as prejudices,

discrimination, being ignored, intrusive behaviours such as staring, intrusive questions and remarks, or even bullying **(1).**

People who have to deal with these reactions may develop a feeling of self-conscious and may perceive stigmatization which may affect self-esteem in a negative way. This in turn can induce avoidant behaviour or sometimes (symptoms of) social anxiety **(3).**

However, the impact of these reactions may differ across individuals. Some persons are more prone to feel stigmatized because of a stronger attentional bias toward stimuli that elicit fear. Psychological therapies can help dealing with these reactions and build self-esteem to increase quality of life **(7).**

Burn and social support:

Social support and community integration after burn is the ability to fully integrate into the dedicated roles at home and the community and the ability to participate in leisure and productive activities at home, work, and school. Long-term psychosocial well-being, satisfaction, and adaptation depends on how well victims can successfully integrate back into their community ***(9).***

Burn injuries can affect human life, such as physical and mental health, functional skills, and performance. Changes in appearance, social isolation, stress, anxiety, depression, low self-esteem, unemployment, financial burden and family problems can occur in these patients. ***(11)***. These burn complications can be exacerbated without adequate social support. ***(12)***

Social support is help from others that the patient can understand and accept. The environmental support from the social support networks of burn patients has a positive effect on the physical and mental health of the patient and protects them against stressors***.*** ***(13)***

Social support can be provided in different ways, but what is important is the patient's perception of the support provided. ***(14)***

Perceived social support is defined as a person's judgement and mental feelings about receiving help from family and friends in needed and stressful situations***.*** ***(15)***

Overall perceived social support can prevent the adverse effects of the disease by changing perceptions of stressful conditions and ultimately improve physical and mental health. ***(14)***

A study in India showed that perceived social support in burn patients is high and has a significant positive relationship with their quality of life; therefore, high perceived social support increases the quality of life. ***(12)***

Another study in Iran showed a significant positive relationship between perceived social support and the self-esteem of burn patients; with increasing social support, patients' self-esteem increases. ***(16).***

Factors associated with the burn patients' social support.

Factors associated with social support in burns patients as gender and ethnicity had a significant relationship with burn patients social support. Factors such as income, educational attainment, burn surface area, reconstructive surgery, quality of life, self-esteem, socialisation ,posttraumatic growth ,spirituality and ego resilience had a significant positive relationship with social support of burns patient.

However, social support in patients with burn had a significant negative relationship with psychological distress, having children ,life satisfaction, neuroticism and post-traumatic stress disorder factors.

Researchers have found that having social support is a significant stress buffer for burn patients, which speeds up their recovery and reduces the length of time they need to spend in the resuscitation and post-traumatic recovery phases. ***(6)***. This highlights the need

for a more holistic approach to caring for burn victims, one that includes the patients' loved ones as well as the focus on wound care. Surprisingly, the lack of social support has a molecular impact, causing a significant drop in the body's level of interleukins that are critical for healing in burn victims. ***(17).***

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