# Importance of Trauma Informed Framework for Social Workers in Burn Care Centers and the Community - A Conceptual Paper

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***Abstract:*** *Burn injuries disrupt the dynamics of families and social networks, requiring interventions that strengthen these support systems. In the United States, the integration of trauma-informed social work into burn care is not only essential for individual well-being, it is also crucial for the optimization of healthcare outcomes and the reduction of public health costs associated with untreated trauma-related emotional and psychological challenges. Trauma-informed social work recognizes that burn survivors have experienced trauma not only during the incident itself but also throughout their treatment and recovery. Social workers trained in trauma-informed care are equipped to recognize these challenges and offer culturally responsive, empathetic and therapeutic support. They help burn survivors regain a sense of control over their lives, make informed decisions about their care, and navigate the complex healthcare and community-based rehabilitation systems post-discharge. This conceptual paper highlights the imperative need for a comprehensive approach to psychosocial burn care that acknowledges the importance of trauma-informed social work in addressing the complex physical and emotional needs of patients and survivors in both inpatient and community-based therapeutic settings while impact of burn trauma on family/caregivers is beyond the scope of the paper. Such an approach aims to restore the physical, emotional and psychological well-being of this population, promoting their path to recovery and reintegration into society.*

***Keywords:*** *Burn injuries, stigma, policy barriers, trauma-informed framework, social work*

"Burn injuries are an under-appreciated trauma that can affect anyone, any time, and anywhere" (Jeschke et al., 2020, p. 1); burns can be caused by cold, heat, friction, radiation, chemical and/or electric sources however, most burns are caused by heat from liquids, solids, and fire. Secondary to seminal technical progress in burn care, the long-term rehabilitation requirements among burn survivors have substantially changed over time. Burn injuries can impact an individual's somatic and psychosocial wellbeing. The path to recovery is a tenuous process that involves rigorous targeted therapeutic interventions in a specialized hospital burn unit, and years of lengthy rehabilitation and follow-up procedures (Kornhaber et al., 2017). A body of empirical research carried out with burn survivors indicates that patients with extended hospital experiences tend to report higher prevalence of acute physical and psychosocial degradation, which varies based on burn severity and total body surface area (TBSA) affected (Cleary et al., 2019; Cleary et al., 2020; Kornhaber et al., 2017; Laggner et al., 2022; Spronk et al., 2022). This highlights that severe burn injuries are associated with unintended morbidity, and it is of utmost importance that burn survivors have access to long-term burn support services across the care continuum (Abrams et al., 2019; Holavanahalli et al., 2016 Zonies et al., 2010). Nevertheless, Ben-Tovim et al. (2008),

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assert that a burn patient's journey within the hospital is highly precarious due to their incessant interactions with a plethora of healthcare providers; no one medical provider or service is involved in the entire treatment process which can result in inadequately coordinated support for the patient and their family members/support systems.

Individuals who endure a burn injury often report symptoms of acute stress followed by other psychological disorders due to trauma of burn injury and treatment (Wallis et al., 2006). In addition, individuals also undergo changes in physical aesthetics (McLean et al., 2015), perceived social stigma (Hoogewerf et al., 2014), and recurring pain and itching (pruritus) that are sustained beyond the healing process and continues long-term for many burn survivors (Falder et al., 2009). Anticipatory anxiety related to painful therapeutic interventions such as wound debridement (surgical removal of dead tissue), donor site harvest and grafting, hydrotherapy, physical/occupational therapy (controlled movement of burned joints), and daily dressing changes frequently become primary sources of both physical trauma and mental health disruptions (Duke et al., 2018). Addressing psychosocial burn trauma is an important consideration as the path to recovery from burn injury cannot be regarded as a purely physical process; unaddressed emotional trauma responses have been found to disrupt the natural process of physical and psychological convalescing, contributing to worsened sequelae over time requiring trauma informed assessment and care (Kornhaber et al., 2014; Kornhaber et al., 2015). Trauma informed care recognizes the patient's previous experience of trauma prior to the burn and how each impact the patient's response (Cleary et al., 2020).

Globally, nearly 11 million people sustained burns severe enough to require medical treatment and is the fourth leading cause in all injuries, behind road traffic accidents, falls, and interpersonal violence, and is higher than the combined incidence of tuberculosis and HIV, and just slightly less than the incidence of all malignant tumours (Peck, 2011). The Centers for Disease Control and Prevention (CDC, 2022) report that over one million people in the United States (U.S) are treated for burn injuries per year and are associated with 1.5% of the total deaths reported due to unintentional injuries across all age demographics, with a higher percentage of burns occurring in rural and high poverty areas. It has been observed that individuals with a history of mental health disorders or individuals with pre-existing mental/behavioural health conditions have a higher probability of sustaining a burn injury in their course of lifetime (Heath et al., 2018; Logsetty et al., 2016; McLean et al., 2015; Vetrichevvel et al., 2018). Recurring episodes of trauma adversely affects a person's inherent coping mechanisms, deterring their motor and sensory functions, and their ability to perform at their fullest capacity (Cleary et al., 2020). Therefore, it can be inferred that burn survivors tend to report higher incidences of psychological trauma and psychological disorders which medical practitioners and care givers need to acknowledge to ensure best practices in the burn continuum of care (Duke et al., 2018).

Assessing pre-morbid trauma history by social workers or other mental health practitioners on the burn care team such as the Patient Health Questionnaire (PHQ-9) as a standardized protocol (Abrams et al., 2019) is often neglected when the priority is on patient survival and is excluded from inpatient treatment plans of care and outpatient referrals for burn survivors, even though many health concerns emerge directly or indirectly from the burn injuries (Cukor et al., 2015; Gardner et al., 2012; McLean et al., 2015; Schneider et al., 2012). The National Association of Social Workers (NASW, 2012) does not recognize burn injuries as a focus for intervention in the private sector and not specifically with service members, veterans, and their families, although the NSW in Australia does acknowledge burn injuries as an area of specialization (NSW Agency for Clinical Innovation, 2011; Thornton & Battistel, 2001). While protocols set forth by the American Burn Association (ABA) strictly mandate the criteria for referral of burn patients to regional burn centers based on burn severity (Smolle, 2017), burn care medical practitioners often fail to recognize the importance of being trauma informed in burn care settings in the U.S. as focus has historically been on bio-medical treatment protocols (Cleary et al., 2020; Rose et al., 2012). Cleary et al. (2020) mention that "Despite the recognition of the impact of trauma and the recent trend and recognised need for TIC services and implementation across health care, there lacks an overarching framework to support and sustain a TIC model of burns care" (p. 1172). Such practise of bio-medical treatment options excludes the opportunity to integrate patients' and their support systems' past and emerging episodes of trauma as part of assessment and treatment protocols for burn patients and survivors (Cleary et al., 2019). Despite the few empirical studies in recent years that have illustrated the pragmatic and seminal effects of a Trauma Informed Care Framework in burn care settings, there is still paucity in literature which addresses use of a Trauma Informed framework within psychosocial service delivery in burn care.

The purpose of this paper is to explore the psychosocial sequelae associated with burn trauma, and how social workers may clinically prepare themselves for this important work, both in the hospital and in the community. This paper also suggests the importance of establishing a trauma informed care framework as a standard of care for social work practitioners which can be applied for the purpose of decreasing the impact of acute stress and trauma with a long-term objective of mitigating re-traumatization of burn survivors.

## Potential Barriers While Seeking Burn Care

The National Association of Social Workers (NASW, 2024a) identifies health conditions that necessitate social work interventions for health equity, reproductive health, epidemic management etcetera, however, they do not specifically address burn injuries. The next section outlines some of the plausible sources of trauma and stress that tend to impact a person's well-being during burn treatment and post hospitalization. These indicators of trauma and stress are not exhaustive but instead inculcates important themes that often influence a burn survivor's journey. A summary can be found in Table 1 at the end of this section.

### *A. Burn Trauma*

Clearly et al. (2020) encapsulates "trauma" as an experience that causes physical, cognitive, behavioural and/or emotional symptoms in response to a devastating or distressing event, including accidents and physical injuries affecting the body, mind and emotional well-being. Exposure to trauma can be primary (i.e., occurring directly) or secondary (i.e., being a witness of others suffering) (May & Wisco, 2016). Trauma can be perceived at an individual or at a collective level, and historical trauma has a tendency of permeating in different psychological and emotional forms over time, negatively impacting multiple generations unless addressed (Bombay et al., 2009; Ely et al., 2018). Individuals with a history of trauma have a higher probability of sustaining a burn episode in their entire lifetime and are also highly liable to trauma responses and psychological disorders that both precede and proceed a burn injury such as substance abuse, depression, and symptoms of acute and post-traumatic stress (Cukor et al., 2015; McLean et al., 2015; Williams et al., 2020). In a cross-sectional study conducted by Schneider et al. (2012), using a large sample of burn survivors from the Station Nightclub fire, the researchers state that burn injuries are strong predictors of psychological and physical trauma resulting in long-term adversities, leading to possible deterioration of occupational, functional, psychological capacities, and quality of life. Research also indicates that eating disorders, substance abuse and schizophrenia spectrum disorders have been found to contribute to the risk of burn injury (Abrams & McGarty, 2021). Additionally, empirical studies support that the prevalence of psychological effects from burn injury last well beyond the initial years following the injury and treatment procedures (Dalal et al., 2010; Gullick et al., 2014; Oster & Sveen, 2014). Interestingly, it has been found that trauma survivors frequently deny pre-existing traumatic experiences with healthcare professionals due to fear of self-incrimination, which creates hindrances for the burn care team to provide informed, targeted therapeutic interventions that incorporate patients' traumatic pasts (Jeffreys et al., 2010; Roberts et al., 2010). Many burn centers rely on self-reporting of pre-existing mental health conditions. However, self-report has been found to be a highly unreliable source of patient data (Sakai et al., 2012). Burn survival represents a unique and yet generalizable perspective on the impact of trauma in that burn treatment has a history of informing other sources of trauma (Gilbran et al., 2022). The value of utilizing a trauma-informed treatment lens that recognizes trauma as "a defining and organizing experience that forms the core of an individual's identity" (Harris & Fallott, 2001, pp. 11-12).

Burn care and rehabilitation are complex and difficult processes that require a multidisciplinary approach to care (Young et al., 2019). Today, U.S burn centers report a 97% survival rate from even the most devastating burn injuries, such as second-degree burns (destroying the epidermis and damages the dermis) and third-degree burns (damage to the full thickness of the skin) impacting 97% TBSA (Centers for Disease Control and Prevention, 2022). With increased survival of burn patients, the historical narrative that once burn wounds are healed the patient is recovered is no longer considered valid. Rehabilitation is recognized as one of the most important in the continuum of care (Jeschke et al., 2020). Survivors of major burn injuries may face physical trauma such as (a) amputation of extremities associated with damage to underlying bodily structures, (b) severe disfigurement, (c) loss of functional capacities and/or disability due to scar contractures, (d) symptoms of acute and post-traumatic stress, (e) risk of opioid dependence, (f) chronic pain, (g) chronic itching (pruritus), (h) fatigue, (i) photo- and thermal sensitivity, (j) sleep disturbances. Psycho-social implications for burn survivors include (k) depression and anxiety, (l) post-traumatic stress and post-intensive care syndrome (PICS), (m) loss of income over an extended period of time and/or inability to return to their previous employment, (n) sexual issues, (o) substance misuse (p) agoraphobia (q) social stigma, (r) discrimination, (s) family distress, and (t) social isolation that may interfere with physical functioning, mental health, quality of life and social participation, even decades after their burn center discharge (Abouzeid et al., 2022; Carel et al., 2023; Davydow et al., 2009; Nelson et al., 2019; Ohrtman et al., 2018; Van Loey & Van Son, 2003; Waqas et al., 2016; Young et al., 2019).

Sirancova et al. (2022) assert that the psychological responses to burn injuries may be contingent on both personality and adult attachment styles. Using the Big Five Model for Personality Style, researchers found patients with higher neuroticism and lower extroversion experienced a higher number of post-traumatic stress disorder symptoms and worse emotional adjustment while optimism and extroversion were positively associated with psychological adjustment at six months to seven years. Insecure adult attachment was associated with higher levels of psychopathologic symptoms of depression, anxiety, and perceived stress in early adjustment to burns. Attachment anxiety was associated with neuroticism, harm avoidance, reward dependence, low novelty seeking, low self-directedness, low cooperativeness, and emotional instability; attachment avoidance was found to be associated with low reward dependence and low amicability. Researchers suggest that recognition of these personality styles may help in understanding patterns and variations in patients' symptom reporting (Holt et al., 2019; Sirancova et al., 2022; Willibrand et al., 2006; Woodhouse et al., 2015).

Research conducted by Jeschke and colleagues (2020) report that burn-injured individuals, regardless of the severity of their injuries or age group, face increased risks of mortality and morbidity. They are more likely to experience hospital readmissions, prolonged stays for musculoskeletal diseases, and elevated risks for cardiovascular events. Additionally, they show higher rates of diabetes-related hospital admissions within the first five years post-hospitalization. Burn survivors face significantly higher mortality rates from trauma and mental illness, especially in the first-year post-injury. Researchers find that their substantial care needs are not being adequately met in the community (Jeschke et al., 2020).

### *B. Disproportionate Alcohol Testing Practices During U.S. Burn Center Admissions*

Silver et al. (2008) state that alcohol testing upon hospital admission varies among burn centers across the U.S., with approximately 50% of trauma patients undergoing blood alcohol content (BAC) testing upon arrival, showcasing inconsistent practices across facilities that may be racially motivated. According to Jean et al. (2022), "Multiple studies suggest that a patient labelled as an alcohol or drug user within the hospital is subject to stigma and negative perception by health care providers during their hospital stay" (p. 193). Research analysing the ABA's National Burn Repository indicated that African Americans have a higher probability of being screened for alcohol intoxication on admission to burn care centers (Abrams et al., 2023). The binary analysis included burn patient demographics and if they were tested for alcohol on admission to an ABA verified burn center. The sample included 16,129 Caucasian cases and 16,129 African American cases and found that the probability being tested for alcohol use for African American/cases of color with a burn severity in the uppermost range were about 2 times more likely than Caucasian burn cases. The overall Chi-square for the logistic regression model based on robust maximum likelihood estimation was, $\chi^2(55) = 3126.5$, $p. < .00001$. The estimated overall R-square was .28 (SE =.007, z = 42.2, p. < .001). The test of all interaction terms was, $\chi2(24) = 59.31$, $p. < .0001$, results were consistent with race playing a role in deciding who is selected for alcohol testing above and beyond such factors as etiology of injury, severity of burn injury, and circumstances of the burn injury. Abrams et al. (2023) propose that irregular assessment of alcohol intoxication in burn trauma patients based on demographics could suggest the absence of standardized protocols or potential cognitive biases among healthcare providers, both of which may contribute to inaccurate physical and behavioural health evaluations and care.

On the flip side, there are significant dangers for burn trauma patients who aren't screened for alcohol misuse but are in fact intoxicated upon admission and go unidentified. This possible bias can have adverse effects on both short- and long-term outcomes, leading to delays in inpatient substance use interventions, and contribute to trauma recidivism (Albright et al., 2009; Cheever & Barbosa-Leiker, 2018). Consequences of unidentified history of alcohol and substance abuse/misuse frequently manifest as intricate intra- and interpersonal patient issues such as continued or elevated alcohol misuse/abuse, patient difficulties during hospital admissions, difficulty with pain control which exacerbates affective disorders and/or pre-existing mental health conditions as compared to the general population.

### *C. Policy Barriers for Burn Rehabilitation*

While both paediatric and adult burn patients in the U.S. receive the same standard of inpatient care regardless of their ability to pay, once patients leave the hospital, their ability to pay either through insurance/third-party payor, state/federally funded medical coverage, or private pay, may inhibit patients' ability to access necessary community-based services. Additionally, lack of community-based providers in the U.S. who are knowledgeable about the bio-psycho-social sequelae associated with burn injuries are few and far between, leaving patients who do not live within the catchment area of the burn center at a significant disadvantage. Public health policy barriers emerge when the long-term needs of burn survivors are unrecognized, the gap which could be filled through social work intervention. Healthcare services in developing countries, including burn care, are limited by financial and human resources. Triage, the process of prioritizing patients based on the severity of their condition in relationship to available resources, becomes crucial in such situations. Sadly, this often results in certain groups, such as children or those with higher status, receiving preferential treatment based on their potential for better long-term outcomes. These life-or-death circumstances of the burn patients shed light on an opportunity for social work to increase their impact and warrants further study.

With decreased mortality of burn survivors, greater attention has been focused on social stigmatization associated with burn injuries; stigma has morphed to include both seen and unseen characteristics that mark an individual as somehow divergent from accepted norms that manifest as social shame that can spiral into social isolation and decreased quality of life (Ross et al., 2021). The Americans with Disabilities Act of 1990 (ADA; 42 U.S.C. §12102(3)(1)A-C) and ADA Amendments Act of 2008 (S.3406) recognize that disability is frequently a socially based identification rather than a purely functional criterion. These acts have far reached implications regarding access to public goods and services and provide opportunities for individuals with disabilities to enjoy the benefits available to the general public, such as recreation, transportation, housing, employment, and telecommunications (West & Yell, 2023). The first two categories of the ADA include: (A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual, (B) a record of such an impairment; the third category, and (C) individuals perceived or regarded as having a disability which focuses on "perceived disability" and specifically addresses burn survivors (ADA.gov, 2020). Although the definition of "disabled" was narrowed by the Supreme Court in its decision in the case of (Toyota Motor Manufacturing, Kentucky, Inc. v. Williams, 534 U.S. 184, 2002), upholding these three categories in the ADA Amendments Act of 2008 (ADA.gov, 2020). Protection is extended to individuals erroneously viewed or treated as having a physical or mental impairment that substantially limits one or more major life activities. Examples include a person whose current non-disabling condition, such as hypertension or facial scar as burn injury, is viewed as creating the risk of future disability, or an individual badly scarred from burns whom an employer perceives as unable to work in a position involving public contact because of concern about customers' negative reactions. (United States, Equal Employment Opportunity Commission, 1992, p. 16).

While identity is highly personal and intrinsic it is socially and historically constructed, encompassing aspects of gender, social class, age, sexual orientation, race and ethnicity and ability; identity is communal and shared because identity development is dependent on interactions with others to occur (Forber-Pratt & Zape, 2017). Burns, especially those to the hands and face, are complex and frequently result in significant scarring that may alter both function and appearance of the burned areas (Ross et al., 2021). And yet, burn survivors frequently deny adoption of the label "disabled" in their self-identification (Barokka, 2022; Khanmalek, 2013; McCall, 2023).

### *D. Psychosocial Support and Financial Burden*

Severe burn injuries create significant distress for both patients and their families, requiring long-term follow-up to improve outcomes. Therefore, it is recommended that social workers be fully integrated into multidisciplinary teams for both inpatient and outpatient care. (Jeschke et al., 2020; Maramaldi et al., 2014). Financial barriers significantly impede burn survivors' access to essential support resources in the United States. The high costs associated with medical treatment, rehabilitation, and ongoing care can be overwhelming for many individuals, particularly those without adequate insurance coverage or financial means. These barriers often lead to delays in seeking care, reduced access to specialized burn centers, and limited participation in support groups and counselling services that are crucial for recovery. Additionally, out-of-pocket expenses for transportation, housing during treatment, and necessary modifications to living environments further exacerbate the financial strain on burn survivors (Keisler-Starkey & Bunch, 2020). It has been documented that individuals from low-income communities, ethnic or racial minorities, children, the elderly, people with disabilities, or those living in unsafe housing conditions are disproportionally burn injured; the burden from these traumatic injuries further marginalize these already disadvantaged groups (Jeschke et al., 2020). A major challenge in burn care provision is that as high as 50% of the patients identified in Burn Injuries Rehabilitation Model System were lost to follow-up at 12-months post hospitalization, meaning they do not continue to seek healthcare services required to meet their full rehabilitative potential (Holavanahalli et al., 2016); keeping patients motivated to adhere to treatment plans will improve health outcomes. Expanded psychosocial resources such as burn-informed community mental health and substance abuse services that are designed to meet the long-term needs of burn survivors are desperately needed, particularly in rural areas where burn-informed services are typically restricted by lack of proximity to regional burn centers. Burn survivors may present in a variety of practice settings including home health, integrated healthcare systems, mental health and substance abuse treatment centers, employee assistance programs, and primary and secondary school counselling. Jeschke et al. (2020) note that psychosocial rehabilitation for burn survivors has historically been neglected, or even ignored for some time. They add that the essential importance and value of good quality long-term outcomes after burn injuries have only recently come into focus and require change. Burn injuries are a chronic, dynamic health condition, with complex and persistent health and psychosocial consequences (Abouzeid et al., 2022).

> The best outcome will be achieved using a multidisciplinary team that emphasizes a dynamic approach to functional restoration through aggressive wound care, scar and contracture management, pain management, mobilization, and psychological support. (Young et al., 2019, p. 129)

With the advancements in burn patient care, survival rates have notably improved. Nevertheless, burns can result in enduring complications and aesthetic issues, potentially leading to long-term social and psychological challenges, including diminished self-confidence and self-esteem (Emami Sigaroodi et al., 2019). Patients who undergo severe trauma such as burns, along with the necessary intensive care treatments, experience profound physiological and psychological stressors resulting in reduced quality of life (Davydow et al., 2009; Lodha et al., 2020; van Loey & Van Son, 2003; Waqas et al., 2016). Various studies across different demographics have consistently demonstrated the advantages of social support and relevance in clinical practice and its crucial role in the overall well-being (Cleary et al., 2019; Cleary et al., 2020. However, individuals who have sustained burn injuries often feel they receive limited support from society, which can have a detrimental impact on their health outcomes. Providing education to the social support network, alongside trauma-informed psychological and substance abuse care, could contribute to better overall clinical outcomes for burn patients (Waqas et al., 2016).

### *E. Individual Stigma*

The emotional needs of burn patients receive comparatively less focus in comparison to their survival and physical requirements (Rubab & Kalsoom, 2018). Burns can be emotionally and psychologically scarring with physical transformations that challenge self-esteem. Research focused on burn survivors observed that the extent of burn injuries was linked to their self-perception of physical appearance two years following a major fire incident, and depressive symptoms three years post-burn among the hundreds of affected individuals (Picoraro, 2014). This adversely impacts the interpersonal relationships, concentration, emotions, and performance of individuals recovering from burns (Gorbani et al., 2021). With the functional decline of burn patients that is associated with the site of the burn, type of burn, and burn scars that are affected by the depth of the burn, their ability to form new social connections and interact with others is negatively impacted (Lawrence et al., 2004). The choice to withdraw from social interactions and activities because of disfigurement can result in social isolation and significantly affect the psychological well-being of burn survivors (Haw & Hawton, 2011; Martin et al., 2017).

A cross-sectional study of adult burn survivors conducted by Ohrtman and colleagues (2018) points out that fatigue, pain, sensitivity to heat and light, and psychological challenges can restrict the range of activities in which burn survivors can participate and limits their ability to engage in family and social activities. Inability to participate in activities that contribute meaningfully to quality-of-life post-burn contributes to their isolation and the burden of trauma without social support. These challenges are exacerbated among older adult burn survivors as their burns contribute to further physical mobility decline (Edgar et al., 2013). It is crucial that educational methods and values of care frameworks are used to mitigate the psychosocial challenges associated with burns, with a specific emphasis on enhancing self-esteem (Mehrabi et al., 2022).

### *F. Community Stigma*

Post-burn stigma pertains to the circumstance in which an individual possessing a particular burn characteristic is unfairly judged in a negative manner within the social environment, as being beyond the usual societal norms (Mercado et al., 2022; Zhang et al., 2023). Burn survivors frequently experience feelings of stigma, shame, guilt, or a diminished sense of self-esteem because of their altered appearance and the prejudice they encounter from others (Link & Phelan, 2001). Due to significant alterations in their appearance, burn survivors frequently encounter discrimination and social exclusion. This resultant stigma can intensify psychological stress and render survivors more vulnerable to developing emotional disorders (Zhang et al., 2023).

A considerable number of burn survivors dress to cover burn scars and avoid being stared at (Ohrtman et al., 2018). Research has found that stigmatizing social behaviours, such as prolonged stares or being subjected to intrusive questions (Martin et al., 2017; Willemse et al., 2023), frequently happen in the aftermath of burn injuries and have been linked to dissatisfaction with one's body image (Lawrence et al., 2012; Thombs et al., 2008; Willemse et al., 2023). Burn survivors with noticeable scars often experience a range of stigmatizing and embarrassing actions from society, which may include being socially excluded, evoking startled reactions, hearing whispers, enduring teasing, and receiving pity (Lawrence et al., 2012; Maslakpak et al., 2022). There exists a lack of awareness among the general population about burns, leading to misconceptions and stigma in society (Maslakpak et al., 2022). Recognizing factors linked to how burn survivors perceive social stigma is crucial, as it is likely to have an adverse impact on their quality of life throughout the recovery process. This understanding can help in providing optimal psychosocial support for the patients' rehabilitation (Ross et al., 2021).

### *G. Potential Impact of Stigma on Burn Survivors*

The transformations in appearance that burn survivors undergo can heighten their expectations of unfavourable judgments and the fear of being rejected. This, in turn, can result in reduced self-awareness, leading to difficulties in expressing emotions (Pearlin et al., 1990). Burn injuries can profoundly impact individuals' lives, potentially limiting their employment prospects due to discrimination, physical limitations, and emotional challenges. If a person is unable to return to work promptly or experiences a delay in doing so, it can lead to a loss of income and support for their family (Katsu et al., 2021). Spronk et al. (2022) found that a significant portion of their study sample faced limitations in their activities and suffered reduced work efficiency, leading to unemployment or alterations in their employment status following their injuries;

individuals with severe burns exhibited decreased productivity and had lower rates of employment.

Participating in sexual and romantic relationships are integral facets of social engagement and research has shown a noticeable decline in the sexual well-being of burn patients (Ahmad et al., 2013; Ohrtman et al., 2020;). The extent of burn injuries and the visibility of scars have been linked to stigmatizing social responses from others, which can consequently have adverse impacts on the mental well-being of individuals who have suffered burn injuries (Cariello et al., 2021). It is advisable to maintain a perspective that recognizes the importance of social support from family, friends, healthcare providers, and other significant individuals in the life of the burn survivor. This perspective should also acknowledge the potential challenges that may arise throughout all stages of burn care (Moi & Gjengedal, 2014).

### *H. Access to Care and Social Acceptance*

Burn injuries disproportionately affect those populations living in poverty. Inpatient protocols are designed for all U.S. burn patients to receive the same level of required care; however, once discharged, burn patients living in underserved communities may have limited access to specialized care as compared to those who live near the regional burn centers. Issues related to transportation insecurity, lack of insurance coverage, loss of income due to extended hospitalization and rehabilitation from the trauma, comorbid behavioural health diagnoses, and deficits in health literacy have been found to be negatively associated with burn care follow-up, optimal wound healing, risk of disability, and social reintegration. Burn center discharge planners are routinely challenged by the lack of community-based services and providers who are knowledgeable in burn specialty care, particularly in large hospital catchment areas that are primarily rural and may span large geographic areas that cover multiple states.

Increased survival of burn patients with as much as 97% TBSA burns also increases the intensity of community-based needs as patients must return to their home communities and attempt to rebuild their lives on their own. Even the best inpatient burn treatment can be diminished when community-based aftercare services are lacking. Based on ethical principles and Educational Policy and Accreditation Standards (EPAS) instituted by the Counsel for Social Work Education such as Competency 4: Engage in practice-informed research and research-informed practice; Competency 6: Engage with Individuals, Families, Groups, Organizations, and Communities; Competency 7: Assess Individuals, Families, Groups, Organizations, and Communities; and Competency 8: Intervene with Individuals, Families, Groups, Organizations, and Communities; and Competency 9: Evaluate practice with individuals, families, groups, organizations, and communities (CSWE, n.d.), social workers are uniquely positioned to provide community-based behavioural health and case management services for burn patients and their families post-discharge in that they have been trained in trauma-informed care, interprofessional collaboration, and issues relative to social justice.

Table 1. *Potential Barriers While Seeking Burn Care*

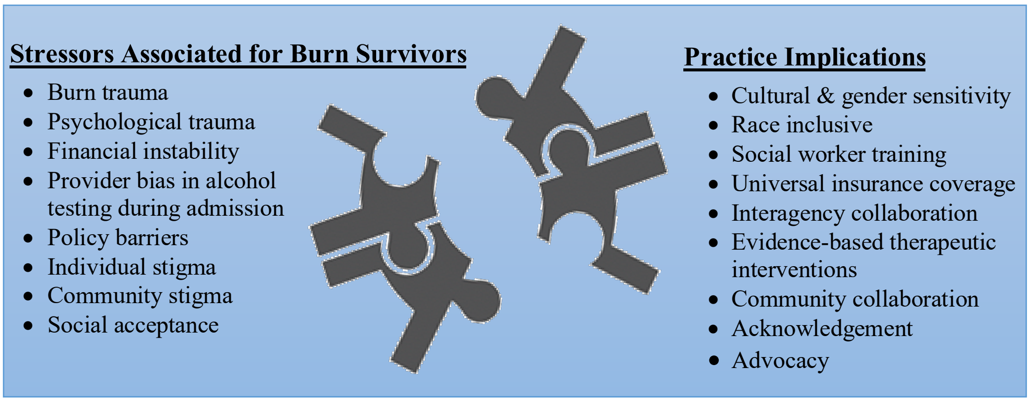
| **Potential Barrier** | **Summary** |
|---|---|
| A. Burn trauma | People who have experienced trauma in the past are more likely to suffer a burn injury at some point in their lives. They are also more prone to trauma-related reactions and mental health issues—such as substance abuse, depression, and acute or post-traumatic stress symptoms—both before and after the burn incident. |
| B. Disproportionate alcohol testing practices during U.S. burn center admissions | Research indicates patients of colour have a higher probability of being tested for alcohol on admission to an ABA verified burn centre in the U.S. |
| C. Policy barriers for burn rehabilitation | All patients with burn injuries in the U.S. receive the same standard of inpatient care, regardless of their financial situation. However, after discharge, access to essential outpatient or community-based services often depends on their ability to pay; there is a shortage of community healthcare providers with expertise in the physical, psychological, and social effects of burns, creating additional risk factors for underserved populations. |
| D. Psychosocial support and financial burden | Burn injuries disproportionately affect vulnerable populations, including low-income communities, racial and ethnic minorities, children, older adults, people with disabilities, and those in unsafe housing. The impact of these injuries further deepens the marginalization of these already disadvantaged groups. |
| E. Individual stigma | Severity of injuries have been found to influence burn survivors' body image after two years and depression levels after three years. These lasting effects harm relationships, emotional well-being, focus, and daily functioning during recovery. |
| F. Community stigma | Burn survivors with visible scarring frequently face social stigma, encountering exclusion, startled reactions, whispering, teasing, and pity from others. |
| G. Potential impact of stigma on burn survivors | Burn injuries often severely affect survivors' livelihoods, restricting job opportunities through discrimination, physical impairments, and psychological struggles. Failure to quickly return to work can result in lost wages and family hardship. |
| H. Access to care and social acceptance | Barriers like transportation difficulties, uninsured status, lost wages from prolonged treatment, pre-morbid mental health conditions, and low health literacy impair burn survivors' follow-up care, recovery outcomes, and community reintegration. |

## Trauma Informed Interventions

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines "trauma-informed approach" as being upheld by six cardinal principles (i.e., safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice, and choice; cultural; historical and gender issues) (SAMHSA, 2014). Trauma-informed care, also called a trauma-informed social work, is a perspective in practice that provides holistic psychosocial support. It acknowledges the significance of past and present trauma and incorporates proactive measures and procedures into service delivery systems to address the onset, worsening, or recurrence of trauma, considering the individual and their surrounding circumstances (Bowen & Murshid, 2016; Ely et al., 2018; Knight, 2015). The NASW reports there are more than 708,000 social workers in the U.S., with the capacity to advocate for the implementation of trauma-informed approaches to service delivery across the continuum of care. The social work field aligns with trauma-informed principles by adopting a comprehensive approach to assessment, intervention, and practice (Ely et al., 2018; Hare, 2004).

Trauma-informed interventions facilitate the identification of trauma and specific triggers that could lead to potential re-traumatization and re-victimization. They also empower the implementation of preventive plans. A conceptual model of burn care social work through a trauma informed lens is proposed in Figure 1.

Figure 1. C*onceptual Model of Burn Care Seeking Experience Through a Trauma-Informed Lens.*



**Stressors Associated for Burn Survivors**

- Burn trauma
- Psychological trauma
- Financial instability
- Provider bias in alcohol testing during admission
- Policy barriers
- Individual stigma
- Community stigma
- Social acceptance

**Practice Implications**

- Cultural & gender sensitivity
- Race inclusive
- Social worker training
- Universal insurance coverage
- Interagency collaboration
- Evidence-based therapeutic interventions
- Community collaboration
- Acknowledgement
- Advocacy

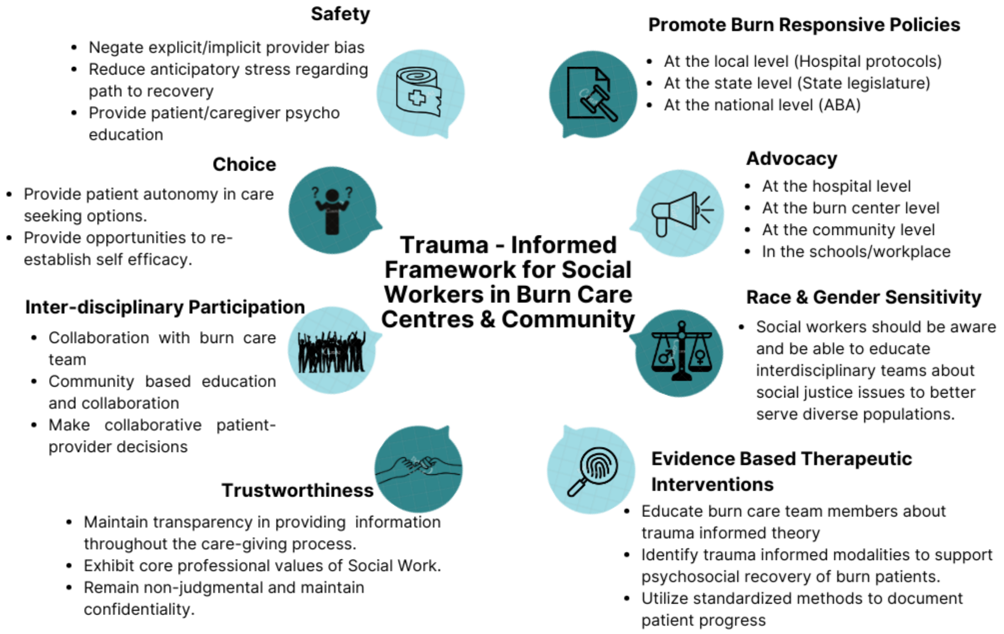
As shown in the Figure 1, different forms of stressors influence a burn patient's journey from the burn injury event, followed by admission to a burn center where demographics may influence implicit/explicit bias of the medical practitioners, and by the emergence of physical and psychological trauma as the patient navigates through different stages of care in a burn center. Once the survivor leaves the hospital, policy barriers and lack of burn care services in semi-urban or rural areas negates the accessibility of wound care management alongside adequate psychosocial support. Furthermore, the probability of encountering social stigma increases to a greater extent and is often interwoven with the dilemma of social acceptance, loss of employment, economic distress and long-term psychological trauma.

Social workers trained in trauma-informed care working in burn care settings play a crucial role as they engage with clients facing the complex aftermath of burn trauma. They bring a heightened sensitivity and understanding of the impact of trauma on individuals, considering the intersections of culture, gender, and race. By valuing evidence-based therapeutic interventions, they approach their work with empathy and a holistic intersectional perspective. It is also essential that the social worker acknowledges that their clients have the autonomy to establish their own recovery objectives, fostering self-determination. The emphasis should be on recognizing the client's potential recovery requirements, respecting their choices, and offering support with problem-solving. Additionally, there is assistance provided for exploring diverse service options and engaging in self-advocacy to empower self-determination.

## Trauma-Informed Care Framework for Social Workers in Burn Care Centers

The importance of Trauma Informed Care in burn care settings cannot be undermined as it has the credibility to acknowledge the prevalence of trauma, its exposition and its impact which further lays the ground for supporting burn survivors psychologically in their recovery by significantly mitigating re-traumatization (Cleary et al., 2018; Cleary & Hungerford, 2015). Healthcare practitioners may become reluctant in addressing challenges (i.e., mental health problems) which may be beyond their areas of clinical expertise and might feel that they lack the necessary training in treating issues of trauma or loss (McLindon & Harms, 2011). The unique positionality of social work practitioners within inter-disciplinary burn care teams, enables them to address a variety of psychological challenges faced by burn patients and their family members (Abrams et al., 2022). Using the Trauma-Informed Framework as depicted in Figure 2, social workers can use this as a foundation to approach all burn patients/survivors as though they have been impacted by trauma, encouraging interactions with clients in a way that minimizes the stressors post burn injury.

Figure 2. *A Trauma-Informed Framework for Social Workers in Burn Centers and the Community*



Social workers in burn care should consider the safety of burn patients/survivors by negating explicit/implicit provider bias and work closely with patients and their support systems to reduce anticipatory stress in their path to recovery and reintegration. Social workers should consider re-enforcing patient autonomy in tertiary care decisions and provide opportunities to re-establish self-efficacy. They should partner effectively within burn care teams to make collaborative patient-provider decisions and work with community-based organizations to educate communities about the challenges faced by burn survivors post-discharge from hospitals for enhanced re-integration into society. Throughout the care giving process, social workers are expected to maintain transparency when providing confidential and non-judgemental information to their clients and their family members as this exhibits the core principles of social work. This framework could prove valuable for social workers in social service environments, especially when clients unexpectedly seek referrals or information related to burn care. Additionally, it is beneficial for social workers operating in medical settings where burn care services may be offered. Social workers should advocate for race and gender responsive care in burn care centers in order to educate interdisciplinary teams about social justice issues to better serve diverse communities. They should also be responsible for promoting and advocating policies that are mindful of risks and impacts of burn injuries at the local (i.e., communities, schools and workplaces), state (i.e., state legislatures) and national (i.e., American Burn Association) levels. Social workers should also accommodate themselves in educating burn care team members about trauma-informed theory and identify modalities to support psychosocial recoveries of burn patients. They should also utilize standardized methods to document patient progress to improve generalizability of patient outcomes across burn centers.

## Implications of Practice

### *Advancing the Trauma Informed Framework in Social Work Practice With Burn Patients*

The past decade has seen the benefits of trauma-informed care (TIC) in multiple healthcare settings. The journey towards recovery after a burn extends beyond the physical realm, emphasizing the significance of addressing psychosocial adjustment and trauma in the caregiving process (Cleary et al., 2020). Implementing the trauma-informed framework will guide social workers to address the psychosocial contusions that impede the healing process of burn survivors. Trauma-informed care provides patients with the chance to actively participate in their healthcare plan, establish a trusting rapport with their healthcare provider, and enhance their overall well-being outcomes (Raja et al., 2015). Through this framework, social workers will find an evidence-based practice mechanism to empathize and develop trust with their clients to provide effective care. Social workers will be able to carefully identify triggers associated with re-experiencing the trauma of burn injury among their clients and include burn survivors in a collaborative journey toward social integration.

Social workers may come into contact with burn patients and survivors in almost any therapeutic setting, both inpatient and/or the community. Whether survivors' scars from burn injuries are visible or "hidden" under clothing, anecdotally, the survivor knows the scars are there and believes everyone else knows as well. Regardless of the depth of the burn or percentage of the TBSA that was affected, the trauma of the burn event and the days and years that follow remain a part of survivors' positive and/or negative personal narratives. Social workers can positively impact those personal narratives through empathy, clinical expertise, positive regard, and knowledge about the burn experience as survivors navigate their healing, rehabilitation, and re-entry. Other implications of practice include policy changes in the form of implementation of universal insurance coverage across the country, inter-agency collaboration and community collaboration to enhance re-integration possibilities of the individual into the society post burn injury. It is also essential that the social worker acknowledges that their clients have the autonomy to establish their own recovery objectives, fostering self-determination. Case management strategies and therapeutic modalities such as trauma-informed care will equip social workers to work with this growing population as patients survive more destructive wounds that result in more devastating effects on individual, family, community, and social systems.

### *Importance of Universal Insurance Coverage and Burn Survival*

There have been multiple commentaries and debates on the effectiveness of universal healthcare in the USA. The success of any trauma-informed framework needs to encompass three important social determinants - access to care, environment, and healthy behaviours. The income inequality in the country is evident through the concentrated population in distressed neighbourhoods and high-poverty neighbourhoods which has seen a significant rise since 2000s (Shrider & Creamer, 2023). In a recent study of the US population, the likelihood of a patient experiencing burns showed a notable correlation with the percentage of poverty (Patel et al., 2018). To mitigate the financial burden of uncompensated care among low-income populations in the country, Medicare and Medicaid offer disproportionate-share payments to hospitals with a predominant population of publicly insured or uninsured patients. Apart from these public insurance initiatives, various programs for uninsured, low-income, and vulnerable individuals, commonly referred to as safety nets, receive funding from taxpayer dollars. As an example, the Affordable Care Act (ACA) augmented financial support to federally qualified health centers. These centers offer primary and preventive healthcare including burn care to over 27 million underserved patients, irrespective of their ability to pay (Roosa et al., 2020). A rise in insurance coverage is linked to increased rates of discharging burn injury patients to inpatient rehabilitation programs (Oh et al., 2021).

The design of such programs has been to provide healthcare access to the entire population in the country. However, the poor alignment of the programs and monopoly given to pharmaceutical companies and medical service agencies does not allow the federal or state governments to set the prices that can be charged for any medical services. These take away autonomy from the hands of the patients to choose medical services that can be affordable to them. The predominant role of insurance as a key determinant for healthcare access in the USA creates barriers for uninsured individuals seeking primary healthcare services. The healthcare system in the United States tends to prioritize corporations and wealthy individuals over the general population, resulting in a lack of coverage for minorities and the unemployed. Consequently, these groups are unable to access essential medical services (Keisler-Starkey & Bunch, 2020). To reduce the gap between burn incidence among low-income groups and affordable healthcare accessibility, there is an urgent need for universal healthcare for all in the country. The United Kingdom has a universal insurance plan for its population and the government strictly regulates healthcare delivery by setting the prices that can be charged for any medical services (Grosios et al., 2010). Providing universal healthcare coverage has the potential to enhance the overall health of the U.S. population. This would, in turn, lead to reduced government healthcare costs, ultimately resulting in lower overall government spending on healthcare (Zieff et al., 2020). Because most of the insured people in the USA avail employer-based insurance plans, with the implementation of a Universal Healthcare in the U.S., the need for employer health insurance would be eliminated, allowing the funds designated for it to be redirected towards employee compensation. Though implementing a Universal health insurance comes with its own challenges, this will provide the population to develop better help-seeking behaviour related to burn care and rehabilitation and provide burn survivors with better post-hospitalization services.

## Conclusion

Trauma-informed frameworks enable social workers to consciously approach client service delivery through socially equitable approaches to create a safe space for trauma management. This innovative framework was developed with consideration for the interdisciplinary aspects of burn care and rehabilitation. It empowers patients to actively participate in selecting the services that align with their preferences. In addition to burn centers, community based social service agencies must be able to design training to aid burn survivors in their physical, psychological, and emotional recovery. Providing social workers with necessary tools for advocacy, this framework will help in mitigating the stigma around burn scars at multiple levels within the environment of burn survivors. Supporting families as they navigate the emotional challenges associated with burn treatment and assisting them in addressing the heightened critical needs of patients affected by burn trauma will provide a conducive environment for better care and reintegration of burn survivors into societal roles. Social workers can become an integral part of burn care protocols if they are educated on the social, physical, and psychological impact of burn injury. The framework will find its significance when healthcare providers involve social workers in burn care management with the sole aim of holistic well-being of burn survivors.

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