

## **From Comfort to Discomfort: Analysis of Burn Injuries**

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Non-accidental acid burn injury is considered as a terrible type of violence in which a victim experiences the persistent facial disfiguring and as well as blindness (Mannan, Ghani, Sen, Clarke, & Butler, 2004). It has been observed that these kinds of injuries result in dreadful traumatic experiences for the victim and leading to perturbed psychological condition. The objective of the current study was to investigate and analyze the psychosocial problems and body image discontentment of acid burn victims in the city of Karachi, Pakistan. A sample of 24 female acid burn victims with ages ranging between 20 to 40 years ( $M=29.34$ ;  $SD=9.18$ ) were approached through purposeful sampling from various burn centers and hospitals of Karachi. It was a qualitative research study carried out with the help of Focus group discussions. Outcomes were critically evaluated and analyzed through content analysis. It was found that the victims suffer a high level of pain and frustration during the burn care treatment. Due to pain and trauma resulting from the horrific memories of violent attacks, they were unable to deal and cope with daily routine and had to struggle to carryout day to day activities of life. The impact adversely effects the psychological, physical, and emotional wellbeing resulting in various psychopathologies. Due to the body image dissatisfaction their confidence level had reduced thus resulting in social withdrawal and isolation. However, it was found that some had effectively learned to cope up with trauma and return to their normal lives. The general themes of shaming, social rejection, lacking confidence, dissatisfaction with body were common in acid burn victims.

*Keywords:* Acid burn, body image discontentment, shaming, social rejection

Intentional burn means the burn injury with intent to harm (Peck, 2012). Acid attack is defined as a form of horrific violence which involves the throwing of nitric, sulphuric or hydrochloric acid onanother person with deliberate intention to cause harm that outcomes in harmful damages for both the victims and victim's family for the rest of the lives (Morrison, 2005).

Acid burns damages the entire skin elements and are unable to be revive except with grafting due to massive damage to the skin (Roos, Weisiger, & Moritz, 1947). Bromberg, Song, Walden, and Bromberg (1965) and Faga, Scevola, Mezzetti, and Scevola (2000) reported that acid has been used as an assault agent and its use has been properly documented in history. Acid attacks are associated with intense facial disfigurement, blindness resulting in a victim's permanent physical disfigurement. However the mortality rate is less that is 1.3% (Bond, Schnier, Sundine, Maniscalco, & Groff, 1998; Leonard Scheulen, & Munster, 1982). The examination of different victims and collecting information from their families has provided with the insight that people have been suffering from high-level severe violence in Pakistan, India, and Bangladesh (Hadi, 2018). Acid burn injuries can be considered as one of the most debilitating and damaging forms of

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trauma, affecting the outwardly and visible appearance of the person. A victim not only undergoes physical pain but also suffers from trauma due to tremendous social, emotional, and psychological challenges.

Hossain (2016) concluded that psychological distress could occur in most of the survivors due to severe burn injuries resulting in body disfigurement. These victims are at greater risk of developing everlasting traumas due to visible changes in their appearance. According to Human Rights Commission of Pakistan there are several cases of acid attacks in Pakistan but are not reported due to the lack of family support, economic dependence on others and lack of awareness in the people that prevails in the different rural and isolated areas. Additionally, according to the study of Equality and Human Rights Commission (2010), the increasing number of acid attacks in Pakistan has been observed in different areas due to several reasons such as the male dominance in the country.

The different degrees of burn can also cause severe health issues and other psychological and physical health issues, especially in women. The deeper scars bring disfigurement to the victim and greatly affect the individual's physical appearance and their perception of not being socially appealing. The physical appearance of a person after burn injury can lead to body image dysfunctions and social isolation (Madaghiele Sannino, Ambrosio, & Demitri, 2014).

As discussed earlier, the impact of the burn can result in permanent disability and disfigurement. The nature of burn injury, its treatment cost, multiple surgeries, and many other stressors trigger psychological problems, especially those associated with anxiety and depression. Psychological assessment and treatment begin at the time of admission and is continuous throughout as the patients and family's needs change at different stages of their recovery. Body image is a complex concept used to express the mental image of one's physical self. After having burn injuries, victims are not accepted due to their impaired body image and high psychological problems. Even after surviving the injuries it is not easy for the victims to mold back into the society. The trauma and the heinous experience make them lose their self-esteem and it is almost impossible for them to get back into the normal life (Wagner, Zatzick, Ghesquiere, & Jurkovich, 2007).

The acid attacks and violence further lead victims towards isolation and inadequate quality of life. The aftereffects of burns cause uncertainties, emotional stress, anxiety, avoidance and the presence of social isolation. All the above-mentioned issues cause high psychosocial and psychopathological issues that are needed to be highlighted and addressed in the country (Anwary, 2003). According to the study of Masood, Kamran and Rafiq (2018) it was reported that women face extreme risk and trauma within their current state of mind. It has been observed that disabled women are abused in wide ranges and are generally perpetuated by others in their belongings.

Acid burns are one of the most intense issues that have been observed within different countries of the world and have been affecting the physical and mental health of the women. There are different research that have been carried on the phenomenon of acid burns and violence in the country (Sajid & Mushtaq, 2018). Additionally, the researchers have also focused on the accidental burns in the kitchen or other types of deadly acts that

are present in the country (Bibi, Kalim & Khalid, 2018). The news and media have been covering different news and cases that are based on such acts and torture for women.

Burn injuries have been one of the major issues that has deadly consequences on the physical, psychological, and emotional behaviour of the people. According to the study of Haque and Ahsan (2014) findings reported that around 90% of the overall burn injuries occur in the low level and middle income level people in the developing countries. It is the fourth leading cause of injury and death around the world. According to the report of World Health Organisation, (2017) nearly 265,000 people die each year due to burn injuries in different countries. In context to Pakistan, the incident of burn and acid attacks has been highly researched and investigated. The Global Burden of Disease (2010) has provided with a report that nearly 5.8% of the overall population of 100,000 dies due to the fire and acid burns (Spencer, 2013; Waldron et al., 2014). Moreover according to Sajid and Mushtaq (2018) the incidence of acid burns and injuries in Karachi have reached a rate of 10.2 per 100, 000 people ranging between ages of 15-55 years. Additionally, there are several risk factors that are associated with the following injuries that are the aftereffects on the women who have faced certain issues.

The Burns Centre in Karachi has provided with the initiative for the treatment of the burns within the specialized units in Sindh (Abdullahi, et al., 2017). Wasiak et al., (2014) reported that Health-Related Quality of Life (HRQOL) is a broader term that includes the aspects of the physical and mental health of the people who are suffering from the pain of burn injuries in Pakistan. Several researchers have conducted the studies for the investigation of the aftereffects and the post burn effects of women (Duke et al., 2015).

All sorts of burn injuries cause a lot of physical and functional disabilities which also damages the sensitivity and visual appearance of the skin. A lot of the burn victims do return to the normal life, but for most of these events are a major life changer. The recovery period is always the hardest and the most stressful, whether it is post-burn period or the one spent in the hospital. After getting burned, people do accept their body image and fall prey to delirium, anxiety (post-traumatic disorder), depression and psychosis, common psychological problems experienced by burn victims. Additionally, body image is vigorously integrated in our psychosexual, psychosocial, and sensory-motor development and is strongly associated to our self-concept (Mock, 1993; Platzer, 1987).

People with burn injuries may face post-traumatic stress, anxiety, helplessness, hopelessness. Being distant from their friends/family makes them depress and while in the hospital, the pain and anxiety keeps them preoccupied with the negative thoughts until the time of post-discharge (Wiechman & Patterson, 2004).

The purpose of this study is to investigate the psychological and psychosocial problems of women after going through the trauma of acid burn injuries in Pakistan. Furthermore, to provide knowledge and detailed information about post burn psychosocial condition of victim to create awareness against this heinous crime. This study was carried out to investigate the psychosocial impact and traumas of acid burn injuries. In the past few years, the cases of violence through acid attacks have been covering the headlines of many local newspapers and social media but not much research has been done in this area.

Acid attacks have become common and frequent mode of seeking revenge. The research was much needed to explore the psychological pain a victim goes through after being disfigured by the violent act. Moreover, this study would be helpful in gathering detailed information about the psychological pain and grief a victim goes through along the physical pain, which would help create an awareness of the seriousness of the crime. To purpose is to explore the phenomena of the psychopathological and psychosocial issues related to acid burn injuries

## **Method**

### **Research Design**

The qualitative research method was used to generate valuable data on a very sensitive issue of acid burn victims and their psychological wellbeing. The qualitative method provides a better insight of such sensitive social issues. The Qualitative research method provides a deeper understanding of a human phenomenon (Druckman, 2009).

### **Participants**

Purposive sampling technique was used in which all participants were contacted based on their availability. Total 30 acid burn victims were approached in which 24 acid burn victims (92%) showed their willingness to participate in focus group discussion, while 6 (8%) participants refused to participate in study. The intent group for the study consisted of 24 adult females who experienced acid burn incidents, ranging between the ages of 20 to 40 ( $M=29.34$ ;  $SD=9.18$ ). All the individuals from all three focus groups were citizens of Karachi, with a total of 8 participants in each group. All participants could understand Urdu language. Burn occurred in the context of victimized traumatic event (such as an assault) and victims have visible scars.

### **Procedure**

First permission was taken for conducting the study from the authorities of “Smile Again Foundation”. Participants were briefed about the purpose of the present study, time period of the study and were asked for their approval. Every Participant was then provided with informed consent to take their formal permission to participate in the study. Total three focus groups were conducted for exploring the facts about the psychosocial and psychopathologies after the violent acid burn incidents. The focus group took place in the afternoon and in the office of “Smile Again Foundation” Circular setting was arranged for the participants so that they could face each other and communicate well. Prior to conducting the focus groups Informed consent was taken. Each focus group comprised of one moderator and one observer (note taker), to prompt the moderators about the missed focal points or strayed discussion conducted by the focus groups. The group members were initially requested to introduce themselves to each other followed by a discussion of focus points regarding their experiences and feelings. Each session lasted for approximately 45-50 minutes. Outcomes were critically examined through content analysis.

### Ethical Consideration

The research has been conducted in a manner that recognized the rights, wellbeing and emotional state of the participants. They were assured confidentiality of the personal information like; their right to request full anonymity in the research or their right to withdraw from the research anytime (if needed).

### Results

The data were analyzed through content analysis and frequency of coded responses was taken. The themes that were found are regarding body perception, emotional well-being, challenges of daily functioning, social rejection, impact on intimate relationship, adjustment in workplace and coping.

**Table 1**

*Content Analysis Showing the Themes of Body Perception / Image (Shaming) among Victims of Acid Burn (N=24)*

S. No	Coded Response	<i>f</i>
1	Recurring thoughts regarding the disfigurement of body?	24
2	What's is my fault in this?	16
3	I'm becoming burden on people	20
4	Apprehensions about future of being targeted again?	23

The above mentioned table shows that the highest frequency is for the category of rethinking and lowest reported category is apprehensions about being targeted again.

**Table 2**

*Content Analysis Showing the Themes of Emotional Well-being among Victims of Acid Burn (N=24)*

S. No	Coded Response	<i>f</i>
1	It is very difficult to cope with it.	19
2	It's very painful to describe this event again and again	21
3	Family support plays vital role to overcome emotional situation	22
4	We need a support system to dealing with negative emotion.	24

The above mentioned table shows that the highest frequency is for the need of social support system to deal with negative emotions and lowest reported category is regarding difficulty in coping.

**Table 3**

*Content Analysis Showing the Themes Challenges of Daily Functioning among Victims of Acid Burn (N=24)*

	Coded Response	<i>f</i>
1	Mostly experiencing discontentment and dissatisfaction while performing daily tasks.	18
2	Due to disability and nonfunctioning of joints its became miserable	11
3	Depression and negative taught providing resistant to perform daily task	15
4	To perform daily task is necessary, so just performing it.	12

The above mentioned table shows that the highest frequency is for the category of experiencing discontentment and dissatisfaction while performing daily tasks and lowest reported category is physical disability due to burn injury.

**Table 4**

*Content Analysis Showing the Themes of Psychological Distress due to Social Rejection among Victims of Acid Burn (N=24)*

	Coded Response	<i>f</i>
1	Anxiety about actual and expected questions and stares from people in the community.	24
2	Worry about how people will react when they see the scars	19
3	Grief or sadness about changes in appearance and physical abilities.	16
4	Mostly people asked intrusive and personal questions.	18

The above mentioned table shows that the highest frequency is for the category of anxiety about actual and expected questions and stares from people in the community and lowest reported category is grief or sadness about changes in appearance.

**Table 5**

*Content Analysis Showing the Themes of Impact on Intimate Relationship among Victims of Acid Burn (N=24)*

S.No	Coded Responses	f
1	Anxiety about intimate settings where scars may be seen.	22
2	Worried about showing their burn scars during intimate experiences.	24
3	Sometimes when partner's sympathetic behavior provide discomfort to me	19
4	Lack of sexual desire after burn injury, and hesitation or the <i>fear of rejection</i>	14

The above mentioned table shows that the highest frequency is for the category of worry about showing their burn scars during intimate experiences and lowest reported category is lack of sexual desire after burn injury.

**Table 6**

*Content Analysis Showing the Themes of Adjustment in Workplace among Victims of Acid Burn (N=24)*

S.No	Coded Responses	f
1	By the empathy of my colleagues overcoming the limitations in physical abilities.	19
2	A desire to be with a trusted person when in working place.	11
3	Avoid discussing about my appearance and burn injury	9
4	Financial support (salary) played vital role in adjustment process	20

The above mentioned table shows that the highest frequency is for the category of financial support and lowest reported category is avoid discussing about my appearance and burn injury.

**Table 7**

*Content Analysis Showing the Themes of Coping Mechanism among Victims of Acid Burn (N=24)*

S.No	Coded Responses	f
1	Adapting to and accepting ourselves as post-burn body	11
2	Trying to be socially adaptive to being visibly different.	9
3	Psychotherapy	16
4	Meditation	15

The above mentioned table shows that the highest frequency is for the category of psychotherapy and lowest reported category is trying to socially be adapting to being visibly different.

## Discussion

Data was analyzed through transcript analysis by using codes on concepts provided by the empirical data. This technique involved an in-depth exploration and interpretation of the issues under investigation which were grounded in the data. The categorization of data and results are presented in the form of theme-based tables. Table 1 shows the themes on body perception /shaming and were related to depicting the psychological and emotional condition of participants after burn. Coming to terms with an altered appearance, burn victims participated in the study showed negative image for their altered body appearance. The female participants with severe burn injuries expressed high level of misery and concerns about their appearance and questioned their acceptability in the community as compared to victims with minor burns. In the present study during focus group discussion all 24 participants reported thoughts of incident preoccupying their mind. Most of the participants also reported apprehension about future. The participants having visible scars found their body image distorted along with intense negative emotions and psychological distress. Researches indicate that people who got facially disfigured due to burn injury were socially rejected and avoidant behavior was commonly observed towards them (Houston & Bull, 1994). Furthermore, females are more likely to be judged and affected because of facial burns, physical appearance acceptance (Lawrence, Fauerbach, & Thombs, 2006) and having widespread burn on exposed regions of skin (Patterson, Ptacek, Cromes, Fauerbach, & Engrav, 2000).

Table 2 shows the theme of emotional wellbeing of burn victims represented by the emotional status of the participants after the violent act. People who survive the fatal burns are then afflicted with physical and emotional scars for life by society. Not only this injury causes financial burden on the patients but also causes victims to suffer from physical and emotional pain, from which it takes a long period of time for them to recover. The burns also cause physical exhaustion which leads to low tolerance level making the victims more sensitive to their surroundings. Thus, the scars sustain their appearance for quite a long time and negatively impact the patient's physical, emotional, and mental state (Patterson et al., 2000). Such survivors often experience distress, low self-esteem, loneliness and isolation. In present study, during the focus group discussion all the 24 participants faced the difficulty in dealing with the negative vibes from the environment and required a good support system. Out of 24 participants 22 of them after a year were able to cope up well with the negative emotions due to their strong family support. The other 2 participants reported that they were struggled for years to overcome the challenges. The burn scars on their body brought negative impact on their way of thinking leading to distress and trauma and making it difficult for them in dealing with the negative emotions. Severe burns are usually associated with the body image and how others attribute with it and social acceptance by others. According to Lawrence, Fauerbach, and Thombs (2006) when the burn victims with revealing facial scars (e.g., around face, neck) interact with new people like non-family members, strangers, the chances of distress are increased.

Table 3 shows the themes on challenges of daily functioning. These responses represent the daily life tasks of the burn participants and their responses while performing it. The interruption of daily life activities and roles due to limited physical activities cause distress, agitation in them. The feeling that something bad will happen suddenly puts

many daily life activities and operations to an end. In the focus group discussion 18 participants felt discomfort/ inability in performing daily activities while 15 participants reported that depression and negative emotions come in their way and inhibit them from doing normal routine tasks. Unaccepted and Stigmatization behaviors are also becoming major problem to burn victims can lead to mental illness. In particular, the social integration of people with burn-related physical problems can be difficult, leading to feelings of social stigma (Pallua, Künsebeck, & Noah, 2003).

Table 4 shows the themes on psychological distress due to social acceptance/rejection response categories representing changes that occurred after an incident in the social communication of the victims. During focus group discussion all the 24 participants reported that they felt nervousness in the social gathering due to the gazes and questions from the people, on the other side 19 participants were anxious about the unexpected reactions from the people. It is commonly reported issues that burn victims usually face direct stares, personal questions, negative comments and statements (Solomon, 1998).

In present research it was also found that burn victims, faced challenges in maintaining intimate relationship with their partners, as quite evident from table 5 under the theme of impact on intimate relationship. The responses from participants define the challenges faced by them in the sexual arousal and intimacy due to physical unattractiveness. They feel rejected and isolated because the looks had changed how their partner perceived her, mostly as not attractive and appealing any more. Wherever the disfigurement is, it poses as a hurdle against the victim to be close and intimate with another person. This is why confidence and self-esteem of a burn survivor is tied to their physicality and the degree of its conventionality (Lawrence, Rosenberg & Fauerbach, 2007; VanLoey & VanSon, 2003) confirmed that there is indication of increased rate of anxiety and depression among adults who have experienced burn injuries which effects the relationship. All of these feelings of contempt towards a society that won't warm up to them also creates an animosity among victims, that turns into anger and self-deprecation both of which are very potent element of depression and suicidal ideation. During the focus group discussion all the 24 participants were concerned about their scars display in the intimate contact while 22 participants also faced apprehension due to scars view in the sexual setting.

After burn incident these victims also faced work related problems. Table 6 showed the response categories showing the factors that lead burn victims to get back to job life after the burn trauma under the theme of themes on adjustment in work place. In the discussion 20 participants reported that wage played a significant role in the adjustment while 19 reported that kind behavior of their colleagues provides the strength to overcome all the limitations regarding to physical capabilities. Social support is the essential key through which burn victims maintain their body image satisfaction. Social supports are important to consider in relation to body image for those working with people who have survived burn injuries (Hodder, Chur-Hansen, & Parker, 2014).

By the help of social support, psycho-therapies such as counseling program and coping strategies like cognitive behavioral trauma can be reduced burn victims. Table 7 showed the response categories describing the degree of burn victims in coping up the

daily stress under the theme on how the coping was done. During focus group discussion 16 participants reported that psychotherapy played a key role in the recovery, on the other side 15 participants reported the meditation as an important factor in the recovery. Treatments in burn patients include cognitive behavior therapy and pharmacological interventions which are helpful to patients suffering from depression. Treatment of social problems includes cognitive-behavioral therapy, social skills training, problem solving skills and community interventions while sexual health promotion and counseling may reduce problems in sexual life reported by (Van Loey & Van Son, 2003).

## **Conclusion**

A majority of acid burn survivors appeared to try their best to adapt well in the long run. Survivors suffering since long reported that burn scars often result in social rejection and isolation. These burn victims also had difficulty in maintaining intimate relation with their partners due to body shaming. Many factors may cause body image concerns after a burn injury, including how a person feels about his or her burns; flawed coping strategies; and a person's gender, mental health history, and support network.

## **Limitations and Future Recommendations**

In present study convenient sampling was utilized due to limited resources. The study restricted to smaller sample size because of the unwillingness of selected participants, they did not feel comfortable to discuss about the incidents and especially about their intimate relationship and sexual issues. A larger sample can be obtained from different hospitals and burn centers. Data can be approached from those clients who already taking therapy so that they are comfortable to share their experiences.

## **Implications**

The findings of the current study highlight the need that the burn hospitals including government, tertiary and burn centers should have rehabilitation centers for burn victims. Multi-disciplinary management including the support from psychiatry and psychology departments provides support in coping burn victims in very effective manner. Burns centres, and hospitals should work together with different NGOs for providing support and help to burn victims. Hospitals can refer these victims to different support groups as well and help implement of policies required to prevent these types of attacks. Moreover, a special consideration be given to highlighted psycho-social problems in the study.

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## ANALYSIS OF BURN INJURIES

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