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DISASTER STRUCK

On August 4, 2020, a massive blast at Beirut's main port devastated large parts of the city leaving more than 220 people dead, 7,000 injured, and more than 300,000 people displaced, causing between USD 10 - 15 billion in financial losses. The explosion has been widely considered as one of the largest non-nuclear blasts in history. Given the sheer size of the explosion, attending to impacted people's needs is of paramount interest, especially knowing the other hardships that the Lebanese population is facing due to the current economic and political crisis as well as the COVID-19 pandemic.

The impact of a traumatic event of this intensity and scale goes well beyond what the eye can see. It is therefore important to acknowledge that victims of this traumatic event are not only limited to survivors of physical injuries, as victims include responders and witnesses who might also exhibit psychological and emotional distress. In other words, if you are a person (not even a Lebanese citizen) with ties to Lebanon, its community, or select individuals, you could very well be impacted by the Beirut Blast. In the aftermath of this disaster, we are therefore looking at a very wide group of victims who has a high likelihood of manifesting various forms of psychological reactions to the trauma.

While many may find it difficult to speak about their emotions and express their feelings (due to varying and persistent taboos associated with Mental Health in this part of the world), it is important to keep in mind that experiencing emotional distress is perfectly normal following a traumatic event of this magnitude.

Most victims will not develop advanced psychological conditions such as Combat Stress Disorder (CSD), Acute Stress Syndrome (ASD), or Posttraumatic Stress Disorder (PTSD). However, many might still experience different and lingering forms of emotional distress such as anxiety, sleeping troubles, concentration issues, and survivor guilt that will impact their ability to return to normality.

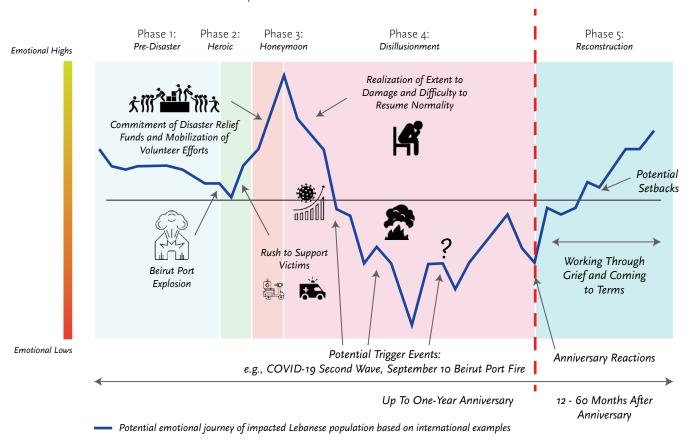


THE SHIFTING EMOTIONS POST-TRAUMA

To best determine how psychological reactions to trauma can surface, it is important to understand how the collective population's emotional wellness can shift in response to a Trauma. Research points to 5 typical phases of emotional response to disasters where emotions shift between highs and lows depending on the characteristics of each phase.

The figure below shows the 5 phases in a typical trauma setting (blue line) followed by an explanation of what to expect during each phase.

Phases of Collective Trauma Emotional Response



Source: SAMHSA Disaster Recovery Phases, Institute for Collective Trauma and Growth, Booz Allen Analysis



Phase 1: The pre-disaster phase

Typically characterized by fear and uncertainty, the pre-disaster phase is the first phase of trauma response. This could be sensed in the various social media posts of the fire preceding the explosion. During this phase the population's emotional status begins to drop (see the blue line in the figure on the left). The pre-disaster phase ends with the disaster occurring. Considering that the Beirut port explosion happened shortly after the fire, Phase 1 only lasted a few minutes. Subsequently, the trauma associated with the disaster caused a sharp drop in emotional status as the impact led to widespread injuries, deaths, and destruction.

Phase 2: The heroic phase

Starting right after the disaster happens, the heroic phase is characterized by emotional highs, buzzing activity, and a low level of productivity. For example, when the Beirut port explosion happened, community members experienced a strong sense of altruism and exhibited adrenaline-induced rescue behavior (rushing for blood donations, transporting victims to hospitals, providing immediate shelter for those impacted, etc.); however, most of the actions in this phase are uncoordinated and impulsive. The heroic phase is often short-lived and the population usually passes quickly to Phase3.

Phase 3: The honeymoon phase

Beginning right after immediate response activities have receded, the honeymoon phase typically lasts for a few weeks. This phase is characterized by a continued shift in emotions to optimism (i.e. emotional highs are maintained). During that phase, community bonding occurs, and disaster assistance becomes readily available. This was witnessed a few days after the Beirut port explosion (e.g., the establishment of disaster funds for Beirut relief efforts, mobilization of volunteers to support rescue and restoration efforts, etc.). This phase is characterized by a positive outlook where the community feels everything will return to normal quickly. The honeymoon phase's period can last days, weeks, or even months.

Phase 4: The disillusionment phase

In stark contrast to the honeymoon phase, the disillusionment phase sees individuals and the community at large start to realize the limits of the promised disaster assistance and media attention starts to fade. Optimism starts to give way to discouragement, while stress continues to take a toll. Negative reactions begin to surface more clearly during this phase especially if there are increasing feelings of abandonment. This in turn leads to the observed drop in emotional status we see in the figure, and victims of affected communities start to experience psychological and emotional distress. It is likely that the victims of Beirut's explosion are now in that phase. This phase can last months and even years especially as the larger community returns to business as usual.

Furthermore, this phase can be extended by one or more trigger events that may accentuate emotional distress. For instance, the advent of the second wave of the COVID-19 pandemic, the Lebanese government resignation, and another port fire on September 10 are going to further impact the affected population's emotional and psychological wellbeing. During this phase, it is crucial that interventions for addressing emotional and psychological distress be implemented to reduce the effects of negative reactions and increase the resilience and coping capacity of the population.

Phase 5: The reconstruction phase

Characterized by an overall feeling of recovery, the reconstruction phase is the "target" phase for Lebanon today. The reconstruction phase begins when people acknowledge that no amount of heroics can change the fact that losses have occurred, but goodness still exists in life. At that moment, individuals and communities begin to assume responsibility for rebuilding their lives and emotional status starts to gradually improve and return to its previous levels.



PSYCHOLOGICAL REACTIONS OF THE DISILLUSIONMENT PHASE

The responses of individuals and communities in the aftermath of a trauma - like Beirut's blast - are most apparent and pronounced during the disillusionment phase. Given that this phase is the longest and has emotional lows, victims of the disaster will suffer most from negative psychological responses that emerge during that period. The nature of these responses will be directly linked to the victims' experiences, their ability to access health services, and the strengths of their coping and life skills and those of their close relatives.

While most do not go on to develop more advanced psychological conditions such as CSD, ASD, or PTSD, victims of trauma still develop responses to traumatic experiences that vary significantly and can be managed once recognized. Responses can mainly come in two forms:

Mild and Short-Lived Reactions: Most victims of trauma exhibit reactions immediately after witnessing the event. Typically, these are short lived,

normal responses as they affect most victims and tend to be socially acceptable and effective in overcoming the psychological distresses of trauma.

Strong and Persistent Reactions: These responses are less common and are exhibited in victims who show continuous distress and no periods of relative calm or rest. They may include symptoms of dissociation (i.e., experience of detachment or feeling as if one is outside one's body and amnesia) and intrusive recollections that continue well beyond the traumatic event – despite a return to safety.

It is important to keep in mind that common reactions to trauma can vary greatly and can be emotional, physical, cognitive, behavioral, social, and developmental in nature. The following table provides examples of these common reactions.

Common Reactions to Trauma - Can you identify a reaction you or someone you know has experienced or is experiencing?

Type of Reactions	Mild and Short-Lived	Strong and Persistent
Emotional	Numbness and detachment Anxiety or severe fear Guilt (including survivor guilt) Exhilaration as a result of surviving Anger Sadness Helplessness Feeling unreal; depersonalization (e.g., feeling as if you are watching yourself) Disorientation Feeling out of control Denial Constriction of feelings Feeling overwhelmed	Irritability and/or hostility Depression Mood swings, instability Anxiety (e.g., phobia, generalized anxiety) Fear of trauma recurrence Grief reactions Shame Feelings of fragility and/or vulnerability Emotional detachment from anything that requires emotional reactions (e.g., significant and/or family relationships, conversations about self, discussion of traumatic events or reactions to them)
Physical	Nausea and/or gastrointestinal distress Sweating or shivering Faintness Muscle tremors or uncontrollable shaking Elevated heartbeat, respiration, and blood pressure Extreme fatigue or exhaustion Greater startle responses Depersonalization	Sleep disturbances, nightmares Somatization (e.g., increased focus on and worry about body aches and pains) Appetite and digestive changes Lowered resistance to colds and infection Persistent fatigue Elevated cortisol levels Hyperarousal Long-term health effects including heart, liver, autoimmune, and chronic obstructive pulmonary disease
Cognitive	Difficulty concentrating Rumination or racing thoughts (e.g., replaying the traumatic event over and over again) Distortion of time and space (e.g., traumatic event may be perceived as if it was happening in slow motion, or a few seconds can be perceived as minutes) Memory problems (e.g., not being able to recall important aspects of the trauma) Strong identification with victims	Intrusive memories or flashbacks Reactivation of previous traumatic events Self-blame Preoccupation with event Difficulty making decisions Magical thinking: belief that certain behaviors, including avoidant behavior, will protect against future trauma Belief that feelings or memories are dangerous Generalization of triggers (e.g., a person who refuses to sit near glass windows) Suicidal thinking

Type of Reactions	Mild and Short-Lived	Strong and Persistent
Behavioral	Startled reaction Restlessness Sleep and appetite disturbances Difficulty expressing oneself Argumentative behavior Increased use of alcohol, and tobacco Withdrawal and apathy Avoidant behaviors	Avoidance of event reminders Social relationship disturbances Decreased activity level Engagement in high-risk behaviors Increased use of alcohol Withdrawal
Existential	Intense use of prayer Restoration of faith in the goodness of others (e.g., receiving help from others) Loss of self-efficacy Despair about humanity, particularly if the event was intentional Immediate disruption of life assumptions (e.g., fairness, safety, goodness, predictability of life)	Questioning (e.g., "Why me?") Increased cynicism, disillusionment Increased self-confidence (e.g., "If I can survive this, I can survive anything") Loss of purpose Renewed faith Hopelessness Reestablishing priorities Redefining meaning and importance of life Reworking life's assumptions to accommodate the trauma (e.g., taking a self-defense class to reestablish a sense of safety)

Source: Trauma-Informed Care in Behavioral Health Services - SAMHSA

It is important to reiterate the normality of these reactions in response to a traumatic event. Even though they can be quite distressing, especially if felt for the first time, one should recognize that these responses are not signs of mental illness or disorder.

To be diagnosed with a traumatic, stress-related disorder, there is a specific constellation of symptoms and criteria that need to be identified and assessed by mental health professionals such as psychologists, social workers, psychiatrists, etc.

The good news is that there is a way forward. The trauma that the Lebanese population endured becomes less disruptive once one finds a way to cope and eventually overcome it. From a psychological well-being standpoint, what really matters is the degree to which coping efforts successfully enable victims to continue necessary activities, regulate these emotions, and maintain and enjoy interpersonal contacts.



COUNTERING EMOTIONAL LOWS WITH PREVENTION

Upon recognizing their emotional status, victims can attempt to self-counter their emotional lows and restore their mental health well-being. For optimal results, a set of basic actions across three main types of coping mechanisms are proposed:

1. Mental Coping Mechanisms

Despite having feelings of anxiousness and loss of control, impacted individuals need to keep in mind that with proper and focused action-taking, it is possible to self-regulate feelings.

First and foremost, impacted individuals should give themselves time to adjust. This will be a difficult time for all victims of the trauma, especially given the current economic crisis. It is therefore important to allow enough time to mourn the losses individuals have experienced and try to be patient with changes in emotional states.

This can be achieved by talking about issues, feelings, and experiences with friends, family, and health professionals. Individuals should also limit exposure to disaster-related news and images while finding time to do activities that they enjoy.

Exercising mindful breathing techniques could be particularly effective. These typically entail taking in 60 breaths and focusing on each exhale. For a more comprehensive exercise, individuals can go further by learning some relaxation techniques such as meditation or yoga.

2. Physical Coping Mechanisms

Traumatic events tend to disrupt the body's natural equilibrium. By engaging in physical activities, victims can boost their natural secretion of adrenaline and endorphins - some of the essential hormones that drive psychological well-being.

A great way to kick-start self-recovery can be by establishing a physical exercising routine that is centered around rhythmic activities such as walking, running, swimming, or body building. Adding a mindfulness element to these exercises, such as focusing on the breathing rhythm, might also complement its benefits.

It is also advisable to avoid potential depressors (e.g., alcohol) which can worsen trauma symptoms and amplify the feelings of depression, anxiety, and isolation.

Furthermore, individuals will need to optimize their sleeping pattern since the lack of quality sleep can exacerbate trauma symptoms and make it harder to maintain emotional balance. Individuals should develop a sleeping routine that involves going to bed early and aiming for at least 8 hours of sleep.



3. Social Coping Mechanisms

Traumatic events might trigger a need for individuals to withdraw from their usual social atmosphere. However, isolation tends to amplify emotional lows, while maintaining social connections is essential to help expedite the healing process of impacted communities.

Some effective ways of preserving healthy social relationships include reconnecting with old friends, meeting new people through social clubs and alumni associations, or proactively reaching out to neighbors or work colleagues. Joining support groups that host other survivors can also be a powerful tool that helps reduce the sense of isolation and inspire others on their recovery.

Even volunteering can be another viable way to challenge the sense of helplessness that often accompanies trauma. By helping others, impacted individuals can recall their main strengths and reclaim their sense of emotional control.

Should these self-coping mechanisms prove to be insufficient or unsuccessful, victims can explore other preventive methods. Two trialed and tested evidence-informed tools, Psychological First Aid (PFA) and Skills for Psychological Recovery (SPR), can be used for that purpose.

PFA is a modular approach designed to reduce the distress caused by traumatic events. PFA fosters short- and long-term adaptive coping to provide early assistance within days to weeks of the traumatic event. Similarly, SPR is a modular intervention that helps survivors acquire skills that enable them to better cope with post-disaster stress. These skills can be covered in as little as one professionally moderated encounter and then reinforced using handouts and practice.

Unlike self-coping mechanisms, these tools will need to be moderated by mental health professionals or certified providers of PFA and SPR services (Any health professional and/or social

worker can seek certification in these tools, in fact, there are online trainings moderated by reputable organizations such as Johns Hopkins School of Public Health – more info can be found on the American Psychological Association website). Victims can opt for paid in-person sessions with certified professionals or seek support from specialized volunteering organizations such as the Lebanese Red Cross, Humanity & Inclusion, Médecins Sans Frontières, International Medical Corps, etc. Online sessions could also serve as a viable alternative, particularly that victims might prefer to avoid in-person options given the evolving COVID-19 situation.

These tools are quite versatile as they can be delivered in a variety of settings such as clinics, hospitals, community centers, schools, etc. and are designed for all age groups. And even though PFA and SPR need to be delivered by certified professionals, they are not categorized as mental health therapy per se.



CONCLUSION

Mental health conditions, including those instigated by traumatic events, are among the most burdensome health concerns for individuals and their communities. The extent to which an individual is left living with a mental health condition can have variable but often profound implications on their psychological wellbeing, physical wellbeing, and their occupational productivity. Therefore, it is vital to recognize early the various reactions to trauma, manage as soon as possible to prevent their devolvement into mental health conditions.

In the event that traumatic reactions endure despite trying different coping mechanisms and seeking PFA and SPR support, it is important to seek expert advice on the way forward. This may be an indication that more advanced therapeutic techniques are needed to help individuals return to normalcy. For it is only when the individuals and communities start to climb out of their emotional lows, that they can begin reconstruction and look toward a brighter and more prosperous future.

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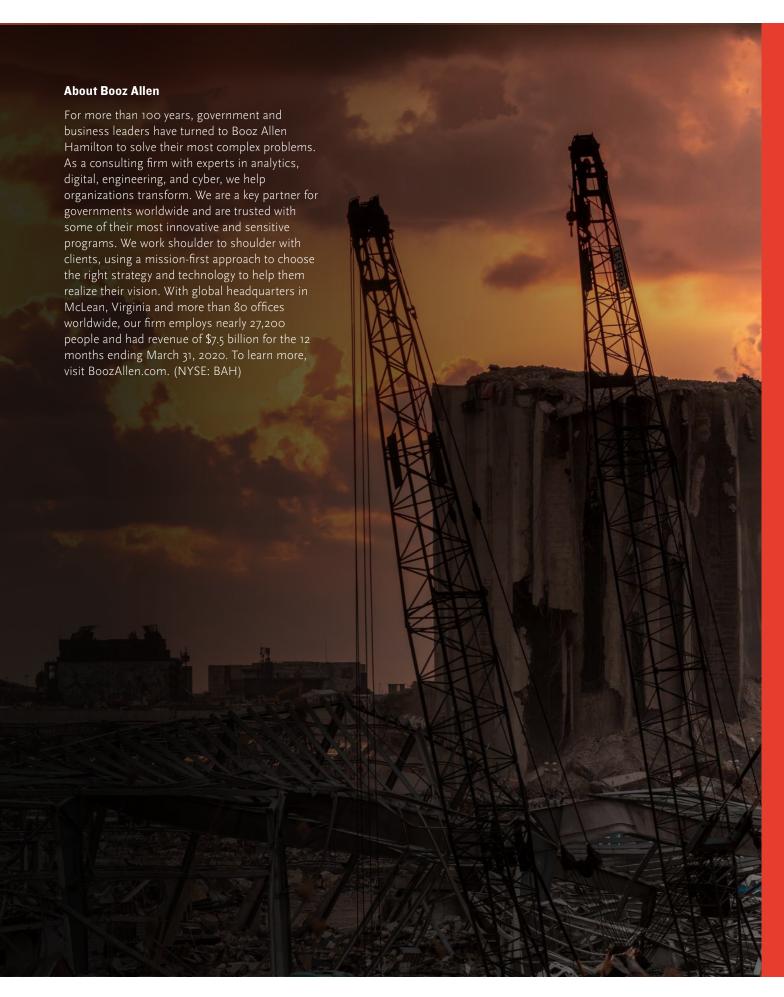
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