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Hiroshima and Mass Trauma Today: Treating Post-traumatic Stress Disorder in Individuals and Communities

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Abstract

At 8:15 am on August 6th, 1945, the world and the way in which we fight wars changed forever. Immediately following the drop of the Little Boy atomic bomb, the city of Hiroshima was decimated, leaving the surviving citizens to deal with poverty, starvation, loss of loved ones, and utter destruction of their lives. After the bombing, survivors were left with burns, radiation poisoning, and physical scars. Unknown to the survivors of the atomic bombings, or *Hibakusha*, were the ensuing psychological and emotional damages. In 2014, we know more about traumatic experiences than in 1945. Studies from Hiroshima's *Hibakusha* have been invaluable to help us understand the psychological effects of traumatic events on the individual. As warfare continues in countries around the world and civilians become targeted more frequently, it is important to understand the factors involved in the process of overcoming stress-related disorders. Hiroshima stands out as the city that has become a leader in positive peace movements and global grassroots nuclear disarmament. By looking at the responses and methods used to treat individuals, we can begin to extend the knowledge about how to treat populations who have undergone mass traumas.

HIROSHIMA AND MASS TRAUMA TODAY

At 8:15 am on August 6th, 1945, the world and the way in which we fight wars changed forever. Immediately following the drop of the Little Boy atomic bomb from the Enola Gay, the city of Hiroshima was decimated. Those citizens in the area who did not die immediately from the fires or the radiation were left to deal with the poverty, starvation, and utter destruction of the lives they once knew. What was obvious after the bombing were the burns, radiation poisoning, and physical scars left. What remained hidden from the survivors of the atomic bombings, or *Hibakusha*, however, were the psychological and emotional damages left behind by one of the worst traumatic events of this century. In 2014, we know much more about traumatic experiences and how they can sometimes cause mental health problems. Studies from Hiroshima's *Hibakusha* have been invaluable to help us understand the psychological effects of traumatic events on the individual. However, as warfare continues in countries around the world and civilians become more and more targeted, it is also important to begin to understand the factors that help entire populations overcome trauma-related disorders. Among all the populations that have been the victims of terrible events, Hiroshima stands out as the city that has become a leader in positive peace movements and global grassroots nuclear disarmament. By looking at the responses from the individuals and the population of Hiroshima as a whole, we can find strategies that are useful to other groups who have undergone mass traumas.

First and foremost, it must be understood how individuals come to develop post-traumatic stress disorder, or PTSD. It can develop as a result of involvement in or witnessing of any traumatic event, such as war, rape or sexual assault, interpersonal violence, accidents, or natural disasters. PTSD is classified in the *Diagnostic and Statistical Manual of Mental Disorder, 5th Edition* (DSM-V) as a trauma and stress-related disorder with eight criteria points which are as follows:

exposure to or the threat of violence (including sexual and emotional violence); death, or injury to oneself or another; a response to the trauma that involves feelings of helplessness or terror that are beyond the range of normal experience; re-occurring and intrusive re-experiencing of the event; persistent numbing of emotions; drastic mood alterations; physiological responses such as sleep cycle problems, hyper vigilance, anger and irritability; the inability to concentrate; and physical behaviors to avoid remembering the trauma. According to the DSM-V, to be considered PTSD, these problems must persist for the duration of at least one month and must cause significant impairment in the life of the individual.

PTSD was first added to the DSM-III in 1980, following an influx of psychiatric clients who were combat veterans, particularly from the Vietnam War. Initial research into PTSD focused mainly on combat and war-related traumas and catastrophic stressors, such as torture, rape, genocide, and the act of killing. The DSM indicates that PTSD is unique among most other mental health concerns because of the importance placed on external causes as the genesis of the disorder, as opposed to gene-by-environment models or strictly organic models. In addition to combatants, the victims of the bombings of Hiroshima and Nagasaki played an important role in helping specialists study individuals with PTSD and other trauma-related mental health concerns. Events like Hiroshima, Nagasaki, the Holocaust, and the Rwandan Genocide can provide key insights not only into how individuals react to trauma, but also how large groups or populations react. First, however, it is important to understand how individuals are treated for PTSD.

When treating PTSD, therapists typically use cognitive therapy (CT), eye movement desensitization and reprocessing (EMDR), cognitive-behavioral therapy (CBT), exposure therapy, relaxation therapy, or medication in combinations or as stand-alone treatments. After the complete destruction of Hiroshima and the surrounding areas, the people had no access to any

sort of medical or psychological facilities or mental health care professionals and there was little research done at the time on trauma and its psychological effects. However, after the city was again able to function, the people of Hiroshima did have at least one therapeutic outlet at their disposal, which could be carried out entirely by individuals: art therapy. Art has value in therapeutic practice for innumerable reasons. First, art therapy allows the individual to communicate with the therapist without having to rely on words; it can be done by individuals of any age and regardless of language ability or even artistic skill. Speaking is an action, which may be difficult for someone who has gone through a trauma whereas art therapy is a method by which the individual is not required to share his or her thoughts with anyone else, including the therapist. For survivors of trauma, this can be a most valuable aspect of the procedure. For the *Hibakusha*, the drawings and other art provided them two services; the drawings, which could be done anonymously, allowed them to open up about any of the memories or feelings that plagued them years after the event. This exercise is similar to exposure therapy and desensitization, techniques that aim to assuage negative reactions to a stimulus through the repeated experiencing of it in a safe environment. The drawings also gave the *Hibakusha* the opportunity to share with the rest of the population, as well as each other, the experiences that they were encouraged to hide without having to physically speak or reveal themselves and their pain to others. According to the accounts of surviving *Hibakusha* still living in Hiroshima today, their experiences were stigmatized by the society at large. For some of the *Hibakusha*, working toward positive peace and nuclear disarmament provided a sense of purpose and goals. Being able to envision the future and to move toward a set goal are important aspects in PTSD prevention as well as treatment, as it gives the individual a way to keep going in their day-to-day life. Having goals does eliminate many of the components associated with PTSD such as flashbacks or hyper-awareness. However, identifying values and goals followed by undertaking committed actions toward those goals are key components in acceptance and commitment therapy (ACT) that helps

to alleviate depressive symptoms, which are common in many people suffering from PTSD. (Cloud 50).

Many of the *Hibakusha* were silenced following WWII due to social stigma resulting from radiation fears, as evidenced by their reluctance to reveal their *Hibakusha* status to potential marriage partners and their banishment from public spaces such as bath houses. (Hein et al. 161) Therefore, many experienced double trauma, first from living through the bombing and then experiencing difficulties and discrimination from other citizens of Japan who feared the radiation or did not want to face the unpleasant side effects of the war. One of the most important aspects of PTSD prevention is early intervention, during which the victim is allowed to share his or her experience with another person who will offer sympathy, support, and safety. However, at this stage, in-depth probing of the experience is not recommended. (Frommberger et al. 62) Because of the fear and hesitancy to send aid from the rest of the nation due to radiation fears and the view of Hiroshima as a lost cause, many *Hibakusha* did not discuss their experiences in Hiroshima on August 6th and the following days at any great length with anyone except with other *Hibakusha*. Although talking with other *Hibakusha* about their shared experiences may have been a beneficial step in the months or years following the bombing, the immediate discussion of the event likely only reinforced the trauma, creating more opportunity for PTSD to develop.

Indeed, it was not just the experience on August 6th that created the potential for PTSD among The *Hibakusha*. In addition to experiencing the atomic bomb, the population of Hiroshima also experienced exposure to very real hardships of surviving the literal and metaphorical fall-out, including traumas such as "residency, healthcare, welfare, and asylum problems, threats to family members, loss of culture or support, and adaptation issues such as discrimination, poverty, and poor job conditions." (Nickerson et al. 7). It is in this regard that I feel Hiroshima did not recover

as well as it potentially could have. Reluctance on the part of the Japanese national government to assist the A-bomb survivors created an environment of devastation for a people with little hope, and for whom food and other relief supplies were scarce. As one *Hibakusha* described it, prostitution, gang-related crime, suicides, and other deaths unrelated to the bombing sky-rocketed because of the hopelessness, which the lack of basic supplies created. As with Maslow's psychological hierarchy of needs based on the individual, a population must also have their basic physical needs of food, water, shelter, and safety met before they can begin to heal or grow emotionally. Relief efforts are a crucial first step in assisting devastated populations, as these help to relieve problems associated with fundamental survival.

One of the problems faced by the *Hibakusha* was the aspect of mass trauma; no one in the area could provide any of these early crisis intervention techniques, and those who may have been able to in the past were also traumatized by the same event. This resulted in a restrained and fearful mindset regarding the psychological and emotional repercussions of the bombing that was doubly enforced after the city was rebuilt and the *Hibakusha* re-entered Japanese society. By that point, those who would develop trauma related mental disorders likely had, and the *Hibakusha* continued to be silenced for decades.

In her article, "Shared Meaning Following Trauma: Bridging Generations and Cultures," Carol Fullerton discusses the importance of a sense of safety for the victims of a trauma, especially for those who have been victims of terror or human-made attacks, as these are more likely than natural disasters to affect the afflicted individuals' sense of security and belief in the goodness of human nature. (Fullerton 61) As discussed in the previous paragraph, in-depth conversations about the trauma experienced immediately following the event can be more damaging than silence. However, once the victim has moved past the initial shock, sharing the experience within a trusted support system is one of the most beneficial ways PTSD can be managed. For the

Hibakusha, this system came in the form of the survivor support groups, which began to crop up several decades after 1945. Because of the uniqueness of the circumstances during and after the bombing, a group of *Hibakushas* that listened to and helped one another through their experiences was probably more helpful than traditional individual or group therapy led by a non-*Hibakusha* professional. While some traumatic experiences are more universally understood (torture, warfare, rape, etc.), support groups for victims of mass traumas provide an opportunity for the survivors to speak with others who understand the cultural and specific implications of the trauma on their mental, health, proving more beneficial.

Important to Hiroshima's recovery, both for the individuals and the city itself, were the attitudes taken among the population as a whole. Some studies suggest that certain personality traits have an effect on how likely an individual is to develop PTSD or, if he or she does develop PTSD, how severe the symptoms are likely to be. In 1984 Lazarus and Folkman described two models by which individuals cope with a trauma they have experienced; the problem-focused model (PF) or the emotion-focused model (EF). The problem-focused model is followed when the individual deals with the issues that arise as a result of the trauma. For example, a person might actively try to combat homelessness after overcoming the state of being homeless him- or herself. The emotion-focused model, however, is the course of action taken by an individual when he or she ruminates on the emotions experienced after a trauma, such as a sense of fear or sadness. An avoidance model that can stand alone or be combined with either of the two other models was also proposed by Carver, Scheier, and Weintraub in 1989 (Weinburg et al, 693). Studies conducted on these models showed evidence that individuals who follow the PF model showed fewer symptoms of PTSD. By contrast, those who did develop the disorder showed less severe symptoms than individuals who followed the EF model, avoidance model, or a combination of those two. The city leaders of Hiroshima followed the PF model by focusing on rebuilding the city and the problems that faced the surviving population immediately, rather than dwelling on

feelings of anger or despair over the bombing. In part, this response was a necessity. Caring for the injured and rebuilding essential structures such as houses and transportation lines were most urgent at the time. Despite the horrors that the survivors were forced to encounter on a daily basis, working toward solving the problems that presented themselves helped to stop the city population from being consumed by grief, which, admittedly, could have acted as a form of early intervention. Additionally, the Weinburg study showed that individuals who scored higher on levels of forgiveness were also less likely to develop PTSD. In particular, those who scored high levels of situational forgiveness were less likely to develop the disorder than those who had high levels of emotional forgiveness. This is because emotional forgiveness tends to require individuals to have an identity to which the forgiveness can be attached; situational forgiveness does not (Weinburg, 700). Unlike warfare before WWII, the citizens of Japan experienced aerial attacks in the early 1940s in which they were unlikely to see the face of their attacker, thereby making an emotional connection difficult. This is especially true of Hiroshima in August 1945, as the Enola Gay, which carried the atomic bomb, flew from such a great height.

Unlike many other cities which had "only" been fire-bombed, Hiroshima had the chance to undergo situational forgiveness as well as some emotional forgiveness in the course of several years after the attack, which may have added to its ability to move forward positively after the bombing. Losing the war resulted in a significant break in fueling Japanese nationalism that supported the war, which allowed the citizens of Japan to look critically at the nation's involvement, which is likely to have led to a perspective shift toward situational forgiveness toward the United States and our use of the atomic bomb. In addition to this, the people of Hiroshima met the United States military personnel that came into the damaged area to help pass out supplies and rebuild, as well as American volunteers who came to help. Unlike the residents of many other cities in Japan, the people in Hiroshima were able to interact with citizens from their former enemy and were therefore about to develop emotional forgiveness after exposure to

faces and identities. As human-caused disasters are more likely to create a negative perception and world view, meeting with even a small percent of Americans was extremely important in preventing long-lasting psychological damage to the Japanese victims in Hiroshima. This hope and look toward the future is likely to have been an important buffer against pervasive negative feelings in the collective culture, and creating these bridges was an important step in both reaching positive peace following warfare as well as enhancing psychosocial well-being.

In many ways, the reactions to the bombing of Hiroshima were unique due to the extraordinary circumstances that caused them. However, there are important generalizations that can be extended to other cultures and populations who experience crises in the present day. For many populations caught in the midst of war, civil unrest, or victims of natural disasters, resources were limited before the crisis and become more so during and after the conflict. Like the citizens of Hiroshima, who were completely devoid of resources after the bombing, these populations become increasingly susceptible to PTSD through the repeated exposure to the devastation and through the destruction of their daily routines. Unlike Hiroshima and its citizens, who received little response after the atomic bombing, areas that go through a traumatic event should immediately be given support services to help begin reconstruction on damaged or destroyed infrastructures and provide food and shelter to the affected populations. This early intervention would help to ensure that the people could quickly return to their day-to-day lives, lessening the chances that and the time during which they re-experienced additional traumas Buffering against the immediate hardships and providing a sense of basic security could help in preventing some of the individuals from developing PTSD or experiencing acute stress symptoms. Another step that should be taken in modern populations that are at risk for high levels of PTSD is the implementation of programs to deal with the immediate and long-term emotional difficulties that arise in response to trauma and that could potentially result in mental health issues. Especially those countries that already lack basic physical healthcare would not have enough health-care workers trained to take care of the psychological needs of their fellow citizens. For this reason, it

may be best for an international humanitarian group specifically trained to handle such cases to be formed. Similar aid groups, such as those working with victims of the current fighting between Israel and Palestine in the Gaza Strip, are forming and responding to disasters with psychosocial therapy.

Therapy types other than traditional CBT, EMDR, CT as well as art or play therapy can be utilized, especially in cases in which language barriers are present. If short- term care could be provided, the immediate need for safety and empathy could be met and the first-hand risks for PTSD could be avoided. As in Hiroshima, if a community overcomes the initial trauma risk factors that make in-depth conversations about the event dangerous, then they could begin to work through the deeper psychological problems as these begin to surface. However, it is important to note that long-term or in-depth care should largely be carried out or heavily guided by the at-risk population itself, as "there has been controversy regarding the treatment of trauma-related mental illness in non-Euro-American cultures…" (Meffert et al 62). Chaitin, Sawada and Bar-On argue convincingly that in some cultures, the diagnosis of "PTSD imposes a potentially harmful sense of victimization upon the narrative of the survivor." In many cultures, importance is placed on remembering events like national tragedies, such as 9/11 in the United States and the Holocaust in Germany.

For Hiroshima, however, there is not a set way for the survivors or the rest of the nation to discuss or remember the atomic bombing. Across decades and regions of Japan, reactions have been greatly varied, ranging from complete silence to open discussions and activism. As such, it is important for any community that has undergone a tragedy to decide for itself how the event will fit into its cultural context and to determine the degree of its importance.

Perhaps one of the greatest strengths of Hiroshima's citizens in recovering was the collective

effort made by the population in addition to the initiatives undertaken by individuals. Despite the variation in responses from individual *Hibakushas* and regions across Japan, the collective population of Hiroshima took the events from August 6th as an opportunity to influence future global decisions positively. As we saw from the research done on forgiveness and its subtypes, individuals who are able to forgive their attacker(s), especially with regard to the situation that caused the trauma, are more likely than those who were not able to forgive their attacker(s) to avoid symptoms of PTSD. Moreover, the culture of the affected population also plays an important role in determining whether PTSD symptoms are more or less likely to be prevalent. Cultures that react with more anger or bitterness may have more difficulty accepting or moving past the loss, and experience more distress over the loss as a result. (Nickelson et al. 11) Although the overall ability of Hiroshima's citizens to forgive the United Stated for dropping the atomic bomb was probably one of the most important buffers in preventing a toxic social climate that would have negatively affected more of its citizens, it is difficult or indeed problematic to impose this reaction on every culture that undergoes a tragedy. For cultures in which forgiveness is less emphasized, it is especially important for bridge-building peace initiatives to take place.

Hiroshima provides an effective example in their Mayors for Peace program, an international venture that includes thousands of members coming from 150 countries, who, in addition to working to end nuclear weaponry, aim to build friendships around the globe. This kind of action may be too difficult for some countries still in the face of anguish, but Hiroshima provides other examples of peace building which are more inwardly or community-focused, such as the Peace Park and Hiroshima Peace Memorial Museum. For populations that have a harder time with collective forgiveness, peaceful memorial sites that remember the dead and serve as a reminder of the effects of violence would still provide an outlet for grief, thereby providing a positive approach to dealing with the violence exerted on that culture without having necessarily to

contact the perpetrators, be they a nation or a few individuals.

Before WWII there was little research done on the mere existence of mental health problems related to traumatic events and the psychological responses of individuals. Now that studies of post-traumatic stress disorder have gained attention in the eyes of the international psychological and humanitarian community, it is important to take those studies a step further and inquire into how they might be applied to entire populations that have experienced mass traumas such as war, persecution, and poverty. Hiroshima and its *Hibakusha* provide an excellent case study for such research. Their response was one, which although imperfect, allowed the city to become a city of peace and an international leader in nuclear disarmament. Although their exact circumstances and responses cannot be mirrored in other societies, the ways in which they handled the trauma provide a good starting point for ways in which the treatment of individuals can be translated into the treatment of traumatized populations.

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