ANNEX A

Public redacted version of “ICC-01/05-01/08-3417-Conf-AnxA”

Mental Health Outcomes of Rape, Mass Rape, and other Forms of Sexual Violence

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The Case of ICC Prosecutor v. Jean Pierre Bemba Gombo

Case No. ICC-01/05-01/08

I. Introduction

This report was created by the Human Rights in Trauma Mental Health Laboratory, an interdisciplinary program based at Stanford University and comprising members of the Department of Psychiatry and Behavioral Sciences, the School of Law, and the Palo Alto University Clinical Psychology program. The lab faculty and staff includes treating academic psychiatrists, professors of medicine, private treating psychotherapists and social workers, human rights lawyers, law professors, and graduate and undergraduate students. The members of this program have amassed considerable expertise in trauma mental health from a range of disciplinary perspectives that render us qualified to submit this report.

This submission is based on our review of the evidence and trial record in the case of *The Prosecutor v. Jean-Pierre Bemba*, Case No. ICC-01/05-01/08-T (including the expert reports and testimony of Dr. André Tabo and Dr. Adeyinka M. Akinsulure-Smith, PhD), along with a comprehensive and comparative literature review on the psycho-social impact of sexual violence and other forms of extreme trauma on individuals, their families, and their communities. In addition, we reviewed testimony from victims in the trial in order to show a direct connection between the literature, expert testimony, and actual events in the Central African Republic (CAR). This Report is also informed by our long experience treating, representing, and working with victims of severe trauma in communities wracked by massive human rights violations. In this report, we rely upon our knowledge of empirical research that links trauma exposure with psychophysiological and neurobiological outcomes, thereby elucidating the mechanisms by which sexual violence and other forms of extreme trauma give rise to the psychosocial outcomes documented in the record. Attached to this report are the relevant *curricula vitæ* (Exhibit A),

including publications and relevant court activities. The laboratory did not receive any compensation in connection with our preparation of this report nor did any of its members.

This report contains a statement of our considered opinion on the individual, familial, communal, and inter-generational impact of the massive and systematic sexual violence committed in the CAR during the period in question (2002-2003) as well as the facts and data considered by us in forming this opinion. On a more hopeful note, we also discuss the prospects for healing, notwithstanding these grave impacts.

Rape and other forms of sexual violence are among the gravest of crimes under international law. While multiple international treaties clearly state that the commission of sexual assault against civilians can constitute war crimes and crimes against humanity (e.g. International Committee of the Red Cross, 1949; Human Rights Watch (HRW), 2007b), systematic rape remains a terror tactic deployed within armed conflicts across the globe (Kumar, 2011; HRW, 1993). While the effect on the human body of such acts is well known and acutely injurious, the ultimate goal of the perpetrators is often to destroy human dignity and profoundly disrupt human psychology (Brownmiller, 1975). In addition, and as this Court well knows, rape and sexual violence are regularly used on a mass scale as a mechanism of instilling terror, feelings of degradation, and humiliation well beyond the immediate victim. Campaigns of mass rape maximize this communal impact through the use of gang rape, child rape, forced sexual intercourse between unwilling individuals, gang and mass rape, and the forced observation of rape by spouses and family members (HRW, 2007b; Tabo, 2010). The effects of rape of a single individual are felt across multiple generations.

In this way, mass rape is a heinous terror tactic aimed at undermining the families and communities to which the particular victim/survivor belongs (Kumar, 2011). Human psychology and community are the targets; sexual terror is the method. As this report recounts, a vast amount of uncontested data within the science of psychology predicts consistently poor outcomes for victims/survivors of rape and sexual assault as well as long-term and pervasive negative impacts on their families and communities.

The systematic rape of the women in CAR was no different. The mass rapes and assaults that occurred between the years of 2002-2003 in CAR constituted institutionalized crimes against the bodies and the human psyches of the civilian population (International Federation of Human Rights, 2003). These assaults, as predicted by the science of medical biology and human

psychology, resulted in appalling damage to the populace's mental and physical health (Vinck, 2010). The science also predicts that this damage will be long-term and inter-generational, harming impacted communities well beyond the individual victim.

Methodology

In addition to the abundance of clinical and professional experience with survivors' psychology, this lab used the rich and vast scientific literature in psychology for the major basis of this report. Other data specifically relevant to the CAR was weighted strongly and sited throughout.

First, we searched peer-reviewed psychological and medical journals using keywords such as "sexual assault," "rape," "posttraumatic stress disorder," etc. The results included single studies, meta-analyses (wherein multiple studies are statistically combined to determine the effect of a particular subject matter), and review articles (wherein multiple studies are combined in narrative form to draw conclusions on a specific subject matter) that have all been reviewed by experts within their respected fields. Second, we consulted reports from global health agencies and human rights organizations to place the events of CAR into a global context. Third, expert testimony and reports from Dr. André Tabo and Dr. Adeyinka Akinsulure-Smith was integrated into the report to provide specific examples of how these peer-reviewed journal articles and global reports apply to the specific situation in CAR. Next, the expert opinion of Dr. Reicherter was used to supplement the already massive amount of data that exist in the psychological and psychiatric literature. Finally, actual victim trial testimony was used to connect the vast literature that exists on relevant subjects and Dr. Tabo's and Dr. Akinsulure-Smith's testimony to actual events that occurred in CAR. This direct connection provides strong evidence on the impact of sexual violence on CAR communities. All of these sources have been cited throughout the report, to identify exactly where this information was obtained.

II. Mass Rape in the Central African Republic: Evidence in the Record

This Court has heard the testimony of mental health professionals with expertise in trauma psychology and with specific experience working with victims from CAR. In 2006, after the mass rapes committed in CAR, a team of humanitarian professionals including Dr. André

Tabo assisted in providing essential health services to victims of sexual, physical, and psychological assault—many of whom had experienced all three forms of attack. In connection with this treatment mission, Dr. Tabo and his team surveyed a subset of civilian women about their experience with sexual violence. The women, who had a mean age of 32.4 years old and an age-range of six to 71 years old, described a staggering range of sexual violence at the hands of the MLC troops. They had been raped in their homes, while running away, and/or on their way to a relative's home. Some victims were the target of gang rape, systematically committed. In many cases, family and community member leaders were raped or forced to witness the rape. All told, out of the 512 women surveyed, 408 (80%) were sexually or physically assaulted (Tabo, 2011).

Dr. Tabo was part of a multidisciplinary team funded by the World Health Organization to contribute to a broader effort that included health care training surrounding the treatment of victims of sexual violence in Africa. On April 12-14, 2011, Dr. Tabo testified on behalf of the prosecution and the legal representatives of the victims in the case of *ICC Prosecutor v Jean Pierre Bemba Gombo* (Case No. ICC-01/05-01/08) about his time working at Bangui Hospital. In his testimony, he described the numerous difficulties faced by his team, including the fact that many women declined treatment because they feared being marginalized by their own community. He described the perception of psychiatry as one that is "tantamount to being crazy;" despite this, victims still came to him in order to address their suffering in an attempt to become healthy again. Despite the hundreds of documented victims, Dr. Tabo testified that this number is lower than the actual number of victims.

Dr. Tabo testified that sexual violence was used in CAR as a weapon of war and targeted mainly the vulnerable: the women and children. He stated that the purpose of this violence is threefold: the women and children are used as "war booty;" this violence served as punitive measures for purportedly supporting the enemy; and sexual violence fundamentally "destabiliz[ed] the enemy." He stated that 42.2% of rapes occurred in front of family members, and that this tactic was used for "punishing her and humiliating that member of the family [who was supposed to protect her] … her husband." In fact, Dr. Tabo stated that "it is first and foremost the need to humiliate that trumps other considerations." He stated that if a man tried to intervene, violence would occur: "Husbands were killed during or shortly after the rape of their wife."

Dr. Tabo testified that some women were rejected by their husbands after being raped. He stated that the husband was viewed as being "shown-up" because of the rape. The children of the women raped were "taunted" within their own community. He stated that spouses who were raped were viewed as "tainted," considered adulterous, and "can no longer participate in the normal functioning of society and of the family unit." Women feel "shame and guilt," cognitions that are an important part of the women's psychology.

Psychological impacts were paramount, according to Dr. Tabo's testimony. The women feared being attacked again, were afraid of going out in public, experienced a loss of confidence, and participated in repeated washing rituals following the assault. The victims would become angry at minor disturbances and abused alcohol and drugs. Dr. Tabo testified that women experienced posttraumatic stress, depression, and melancholia.

Dr. Tabo also testified about physical consequences of rape. He stated that many women screened positive for HIV, some of them as a result of the rape. He testified that four women became pregnant. Of these women, one cared for the child, one "didn't want to have anything to do with the child," one had an abortion, and one person's whereabouts became unknown.

He testified that psychological trauma is a lifelong experience: the memories of this event do not go away. If these memories are alleviated, they never fully leave and a "residual" effect remains. He stated that he has found that based on his years of experience of general practice, "the patient kills himself, or herself, if the case is particularly bad; either the patient gives up and stays home with his or her disorder, or the person ... no longer agrees to keep on living and falls silent with his or her suffering."

The reporting by these victims of the impact of these assaults on their health and well-being is consistent with expected outcomes for post-rape populations. Most importantly, all subjects manifested acute physical and psychological injuries. Physical injuries included gunshot wounds, bone fractures, cutaneous lesions, lesions of the hymen, vaginal lesions, and perineum scarring. Individuals experienced unwanted pregnancies and sexually-transmitted infections, including HIV/AIDs. Psychological evaluations of victims following the sexual assaults revealed a range of damage to their mental faculties, including posttraumatic stress disorder, depression, anxiety, and feelings of guilt/isolation. The mental health findings in particular are consistent with the science of psychology and the social science research generated from other communities experiencing mass criminality.

International criminal law has a tendency to focus on harm to the individual victim at the hands of an individual perpetrator. However, the science of psychology and research conducted in other situations of mass violence (such as Bosnia Herzegovina and Rwanda (Kumar, 2001)) teaches us that the consequences of sexual violence deployed on a massive and systematic scale are far more extensive, pervasive, and devastating than can be measured in an assessment of an individual victim (Reid-Cunningham, 2008; Seifert, 1994; Wax, 2004). In particular, the purposeful commission of rape—including mass rape—in front of husbands, children, and community members is a specific means of causing added terror, humiliation, and degradation for victims, their families, and their community. The remainder of this brief will discuss these disparate impacts in greater detail and with reference to the scientific literature.

III. Psychological Consequences of Rape and other Sexual Violence

On November 29 and 30, 2010, Dr. Adeyinka Akinsulure-Smith testified on behalf of the prosecution and the legal representatives of the victims in the case of *ICC Prosecutor v. Jean Pierre Bemba Gombo* (Case No. ICC-01/05-01/08). Originally from Sierra Leone, Dr. Akinsulure-Smith is a senior and supervising psychologist at Bellevue Hospital in New York, New York, where she oversees a program specifically designed to treat survivors of torture. She described being part of the treatment team for individuals who had been witnesses to crimes perpetrated on their family members, had their homes destroyed by fire, and had been forced to leave their entire country. She stated that she had worked with individuals who had symptoms of depression, anxiety, and had been diagnosed with PTSD.

Part of her experience also included being part of a team that examined women from Sierra Leone who had been victims of sexual violence during the conflict that occurred there from 1992 to 2001/2002. Her testimony was consistent with Dr. Tabo's testimony in that she describes women suffering from depressive symptoms and PTSD. The women dealt with unwanted pregnancies, which included resort to abortion, and experienced difficulties "reconnecting, re-engaging in their communities." She went on to say that these crimes "had really impacted their lives in devastating ways."

Dr. Akinsulure-Smith testified that the damage done to victims of sexual assault in wartime can be "extensive" and include medical, physical, and psychological consequences. She points out that her patients often say "physical scars heal; the emotional stuff stays with me." This "emotional stuff" to which her patients were referring, according to Dr, Akinsulure-Smith,

included PTSD and depressive and anxiety symptoms. She described trauma as a "horror." She stated that the women blame themselves, experience shame and guilt and consider themselves "damaged goods." She stated that family members sometimes do not understand why they did not fight back. PTSD often comes with memory impairment surrounding the trauma, sleep difficulties and nightmares, according to her testimony. In order to alleviate these symptoms, women may resort to substance abuse and self-harm. Dr. Akinsulure-Smith made it clear that traumatic stress does not necessarily come from being a direct victim, stating that: "when an individual is placed in a position where they're forced to witness a loved one violated in this way, in a sexual way, it is deeply traumatizing." She also stated the devastation is "profound" if a parent witnesses a child or a child witnesses a parent being forced into sexual activity. To this point she stated "the younger the victim, the more devastating and the more problematic," and that this can include developmental delays. Dr. Akinsulure-Smith stated that much of her work requires her to gain trust and build rapport between her and her patients so they will be open about their trauma and its impacts. She stated that family members sometimes do not understand why assault survivors are so irritable or sad, and psycho-education is indicated to address this aspect of the long-term effects of sexual violence. Psycho-education is also part of her treatment, so that people understand that this did not happen because of something supernatural (i.e. "gods").

The destructive impact of sexual violence on men and women is well known in the scientific literature emerging from the fields of psychiatry and psychology and is consistent with Dr. Akinsulure-Smith's testimony. Sexual violence causes terror and destabilization by undermining feelings of individual and community safety and security (Lee Koo, 2002). Safety is undermined while the individual victim is held captive and is rendered powerless to control what is happening to her/his own body. This effect may become a chronic state. A sense of safety and security is a basic human need that is essential for individuals to perform their daily functions and to engage in activities that promote growth and development (Maslow, 1943). When an individual does not perceive that she or he is safe, basic daily activities such as feeding, sleeping, and self-care are undermined and dysregulated. When this occurs, higher-level pursuits—such as taking care of others, gaining employment, and pursuing an education—are also threatened and rendered more challenging, if not impossible.

Feelings of danger, threat, and helplessness are not only experienced at the time of the rape itself and in its immediate aftermath, but also resurface well into the future, even when objective safety is re-established (DSM-IV; DSM-5). Family members and friends are helpless to assist and are therefore rendered incapable of re-establishing a sense of safety and security and thus of providing support to the survivor. In instances of mass rape, the undermining of this essential sense of safety is experienced by the victim's community as well as by its individual members. The entire social structure of a community is thus destabilized. Acts of mass rape impact the development and functioning of the individual and the community across multiple generations (Reid-Cunningham, 2008; Seifert, 1994; Wax, 2004). As such, evaluations of individual victims cannot fully capture the extent of damage inflicted upon the communities by massive human rights violations. Victim testimony in the present court case describes how soldiers would immediately come in and pillage the community, stealing resources such as mattresses and making the women cook for them. This can destabilize the community, take away resources that can help people of the community cope, and provide another barrier as the people within the community attempt to recover from their trauma.

The psychiatric literature predicts very poor functional outcomes for such victims of sexual assault. The resulting myriad of individual consequences includes psychiatric disorders such as posttraumatic stress disorder, depression, and anxiety (Heim, Shugart, Craighead & Nemeroff, 2010; DSM-III; DSM-IV; DSM-5; Sadock, Kaplan & Sadock, 2007). Outside of these named mental health diagnoses, individuals suffer from abject feelings of hopelessness (Muhwezi et al., 2011), spiritual degradation (Messina-Dysert, 2012), heightened suspiciousness, persistent confusion, and fear (Kilpatrick, Resick & Veronen; 1981). Victims of trauma see themselves as vulnerable, view the world as lacking meaning, and view themselves as lacking worth (Janoff-Bulman & Frieze, 1983). Each of these outcomes and diagnoses is discussed below in greater detail.

A. Posttraumatic Stress Disorder

Posttraumatic stress disorder (PTSD) is one of the most common diagnoses associated with rape (Holmes & St. Lawrence, 1983). This fact has gained scientific attention since the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), published in 1980 by the American Psychiatric Association. The National Comorbidity Study—a massive epidemiological study that surveyed 5,877 individuals in the United States—indicated that

among women, rape is the most commonly associated index trauma with PTSD (not including an "other" category; Kessler et al., 1995).

If women had experienced rape as their only lifetime traumatic experience or they named rape as their most distressing trauma out of many, 45.9% developed PTSD (Kessler, et al, 1995) at some point in their lifetime. In the literature, this is what is considered a lifetime prevalence rate among those who were raped. More broadly, a lifetime PTSD prevalence rate is an epidemiological statistic that indicates how many people in the community/society develop PTSD with or without any traumatic experience. The literature also discusses what is called a point-prevalence rate, an epidemiological statistic that indicates how many individuals are currently suffering from a certain disease *at that time point* or *within a certain time point*. The DSM-5 cites Hinton and Fernandez (2011), stating that the 12-month prevalence rate for PTSD in Europe, Asia, Africa, and Latin America countries is 1% or less (APA, 2013). In an urban sample in the United States, sexual assault and rape were the top two index traumas among individuals diagnosed with PTSD (49% of individuals with PTSD were victims of sexual assault, and 23% were victims of rape) (Breslau, Davis, Andreski & Peterson, 1991). In other words, victims of sexual assault and rape comprised nearly ¾ of all individuals who were diagnosed with PTSD. Results from previous research demonstrate that prevalence rates of PTSD range from approximately 30-70% in sexual assault victims (Dunmore, Clark & Ehlers, 1999; Kilpatrick, Edmunds & Seymour, 1992) compared to a prevalence of 1%. The DSM-5, published in 2013, is unchanged in indicating that sexual assault greatly increases the chances of developing PTSD.

Posttraumatic stress disorder is a chronic and debilitating mental illness. The DSM-5 (APA, 2013) defines PTSD as a conglomerate of symptoms that results from experiencing, witnessing, or being exposed to traumatic events. These symptoms are divided into four different categories of symptomology: intrusive thoughts pertaining to the event, avoidance of stimuli related to the event, negative changes in thoughts and/or mood regarding the event, and hyper-arousal (APA, 2013). Intrusive thoughts may include memories, dreams, dissociation/flashbacks, and psychological or physiological distress when triggered by reminders of the event (APA, 2013). Avoidance symptoms may include attempts to evade internal thoughts or emotions about the event or external people, places, and objects that are somehow related to the event (APA, 2013). The negative change in mood and/or cognitions include an inability to

remember events surrounding the trauma; negative views about the self, others, and the world; self-blame; negative feelings such as shame, fear, or guilt; anhedonia (the inability to experience pleasure); a sense of detachment from people; and an inability to feel positive mood states (APA, 2013). The hyper-arousal symptoms may include irritability and/or anger; self-destructive behavior; hypervigilance, or on constant alert for external stimuli; exaggerated startle response; decreased concentration; and sleep problems (APA, 2013). In order to meet the diagnosis of PTSD, individuals must have one symptom each from the intrusive and avoidance category, and two symptoms each of negative changes in thoughts and/or mood and hyper-arousal (APA, 2013).

PTSD symptoms usually have an impact that lasts longer than the three months required by the diagnosis. For example, Burgess & Hollstrom (1979) report that 63% of their subjects experienced these long-term effects, while McCahill, Meyer & Fishman (1979) report 33%. Even individuals who did not directly experience the sexual assault may suffer from PTSD symptoms due to exposure via their loved ones. Included in the criteria for a PTSD diagnosis are situations in which the individual witnesses a traumatic event (e.g., exposure to serious violence or sexual violation) or learns that the traumatic event occurred to a close family member or friend (DSM-5).

The rates of PTSD prevalence in non-conflict parts of the world are low. However, PTSD lifetime prevalence rates increase dramatically among individuals who have been exposed to sexual assault and rape. Women exposed to sexual assault are 5.5 times more likely to develop PTSD as compared to victims of other types of trauma (Kilpatrick, Edmunds & Seymour, 1992). Strikingly, 100% of the women treated at the Department of Psychiatry at Bangui National University Hospital in CAR suffered from posttraumatic stress symptoms (Tabo, 2011). When the experience of sexual assault is coupled with exposure to conflict, the risk for PTSD is increased (previous research indicates that PTSD rates can double following exposure to combat and conflict; Hoge et al., 2004). These numbers suggest the impact of the rapes in CAR caused psychiatric damage far beyond what might have been predicted based on research from non-conflict zones. While increased prevalence rates are expected for a population of rape victims, the alarmingly high rates of posttraumatic distress in the current population in CAR underscore the heinous and pervasive nature of the crime. The individuals impacted by the current crime (including the men and women who testified in court, the women treated at Bangui Hospital, and

the general community) experienced multiple traumatic stressors, increasing the likelihood that they would be severely harmed. Multiple studies have found that an increase in the number of traumatic events is associated with increased psychiatric symptoms (Vrana & Lauterbach, 1994; Follette, Polusny, Bechtle & Naugle, 1996; McCauley et al., 1997; Nishith, Mechanic & Reside, 2000).

The evaluation of PTSD symptomatology likely does not fully capture or characterize the entire range of psychological consequences of trauma exposure (van der Kolk, Pynoos, et al., 2009; D'Andrea, Ford, Stolbach, et al., 2012; Cloitre, Stolbach, Herman, et al., 2009). In particular, psychiatric sequelae of trauma may extend beyond the classic symptoms of PTSD when (1) the victim is a child and still undergoing development (which lasts until approximately age 25), (2) the victim has experienced more than one traumatic event in his or her lifetime, and/or (3) the trauma is experienced within the context of a caregiving or support system that does not ensure safety and stability. A large percentage of victims of sexual assault and rape in the CAR likely meet at least one, if not all, of these criteria. For instance, 19% of victims treated at Bangui Hospital were under the age of 20 (Tabo, 2011). In addition, sexual assault was experienced within the context of military action in an area historically affected by conflict and violence; therefore, the current instances of sexual assault were not the only traumatic experiences that individual victims had undergone across their lifetime. Finally, because of the nature of the crime and conflict, the caregiving, support, and safety system in communities were undermined at the time of the assault, leaving individuals without a safety net to support adequate coping. Based on these considerations, there is strong reason to believe that the range and severity of psychological distress suffered by victims and communities in CAR is not captured by the concept of a PTSD diagnosis.

B. Anxiety Disorders

Previous versions of the DSM categorized PTSD as an anxiety disorder, and the current research indicates a significant overlap between anxiety symptoms and PTSD symptoms (e.g., Ellis, Atkeson, & Calhoun, 1981; Kilpatrick, Resick & Veronen, 1981). Rape victims experience a significantly greater number of anxiety symptoms and specific phobias (Kilpatrick, Resick & Veronen, 1981). Ellis, Atkeson, and Calhoun (1981) published congruent results. Anxiety symptoms and disorders have numerous debilitating effects and consequences for the individual. The experience of fear, avoidance, panic, and uncontrollable arousal are common

symptoms of anxiety disorders that can lead to significant functional impairment (DSM-5). These symptoms not only affect the individual but have repercussions for family and community. For example, children of mothers with panic disorder are 6.8 times more likely to develop the disorder, and children of mothers with phobic disorders are 3.1 times more likely to be diagnosed with the disorder at some point in their life (Merikangas & Pine, 2002).

C. Mood Disorders

Mood disorders are a common outcome for rape survivors (Steketee & Foa, 1987). Major depressive disorder or depressive symptomology is associated with a history of sexual abuse (Becker-Lausen, Sanders, & Chinsky, 1995; Beitchman, Zucker, Hood, DaCosta, Akman, & Cassiva, 1992; Gold, 1986; Kendall-Tackett, 2007; Morof et al., 2014; Trickett, Noll, & Putnam, 2011). In a sample of 5,877 individuals, the National Comorbidity Study results indicate that 39.3% of women who were sexually abused as a child developed depression (Molnar, Buka, & Kessler, 2001). In a sample of 3,001 women (The National Comorbidity Study-Replication), 22% of women who were raped experienced a major depressive episode (Zinzow et al., 2012). Female survivors of rape are 5.46 times more likely to experience a major depressive episode compared to non-sexual assault victims (Zinzow et al., 2012).

According to the DSM-5, symptoms of depression include depressed mood, suicidal thinking, loss of appetite, weight loss or gain, loss of interest, and hopelessness. Irritability and somatic symptoms may also be present (APA, 2013). The Bangui report is indicative of depressive disorders; 36.9% of women suffered from reactive depression and 2.2% suffered from melancholia (characterized by extreme lethargy). Women in the Bangui Hospital sample experienced much stigma in connection with their victimization (97.8% according to the report) and were therefore likely to have experienced feelings of shame and self-blame that served to exacerbate depressive psychopathology. Shame can play an important role in depressive symptomology; indeed, 36.4% of individuals in the Bangui Hospital sample experienced shame and/or embarrassment.

The outcomes from the Bangui Hospital report are consistent with worldwide sequelae of multiple diagnoses. Similar to anxiety disorders, the presence of depressive and mood disorders extends beyond the individual victim; research suggests that children of depressed mothers have a lifetime prevalence rate of depression between 20% and 41% (Goodman, 2007).

Children of depressed mothers also experience mental and motor developmental issues, self-regulation problems, and increased negative affect (Goodman & Gotlib, 1999).

D. Dissociation

Dissociative symptoms are another common response to trauma, sexual assault, and rape; these are not fully captured in PTSD diagnostic criteria (DSM-5; Freyd, 1996; van der Kolk, Pelcovitz, Roth, et al., 1996). Previous research indicates that approximately half of individuals who develop PTSD experience significant dissociative symptoms (Breire, Scott, & Weathers, 2005) compared to only 4.4% of adults with no diagnosis. Dissociative symptoms include an unawareness of one's present state, flashbacks, out-of-body experiences (depersonalization), or feeling as if the world around one is surreal or artificial in some way (derealization). The DSM-5 also defines a dissociative amnesia wherein an individual is unable to remember events from the trauma. Dissociative responses during experiences of trauma can be viewed as evolutionarily adaptive as they create cognitive and emotional distance from the horror, terror, and pain of the trauma; however, the same dissociative experiences that are protective during the moment of trauma are maladaptive when they resurface in individuals' subsequent daily lives and can cause significant impairment in functioning when they become pathological (Freyd, 1996). Carlson, Dalenberg & McDade-Montez (2012) concluded that dissociative symptoms are related to traumatic experiences and their severity, effects can be long lasting, and high dissociative symptoms increase the likelihood and severity levels of PTSD symptoms.

E. Other Comorbid Mental Health Disorders

Many other mental health diagnoses are related to trauma and are often seen as co-morbid (i.e., occurring simultaneously) with PTSD. In fact, the comorbidity of psychiatric disorders is thought to be the rule rather than the exception in cases of interpersonal trauma and abuse. For example, forty percent of children exposed to trauma are diagnosed with at least two psychiatric disorders (Copeland, Keeler, Angold & Costello, 2007). Major depression, dysthymia (chronic but less severe depression), bipolar disorder, generalized anxiety disorder, panic disorder, agoraphobia, social phobia, and obsessive-compulsive disorder have all been linked to PTSD (Creamer, Burgess & McFarlane, 2001). The 1995 National Comorbidity Study established a historical precedent for understanding PTSD and comorbid disorder. PTSD was found to be comorbid in 47.9% of individuals with a history of major depression, 21.4% with dysthymia, 16.8% with generalized anxiety disorder, 31.4% with specific phobia, and 27.6% with social

phobia (Kessler et al., 1995). More recently, in a study of 3,199 individuals, 1% of individuals were diagnosed with only PTSD; 5.8% of individuals with PTSD were diagnosed with only co-morbid internalized disorders (e.g. depression, anxiety); 1.5% of individuals diagnosed with PTSD were diagnosed with externalizing disorders (e.g., oppositional defiant disorder) only; 19.5% of individuals with PTSD were diagnosed with two co-morbid internalizing disorders (e.g. depression and dysthymia); 14.1% of individuals were diagnosed with one externalizing and one internalizing disorder; 22.8% of individuals with PTSD had major depressive episodes and at least two more disorders; and 54.8% of individuals with PTSD also had bipolar disorder and at least two other disorders (Kessler, Chiu, Demler & Walters, 2005). In regard to severe trauma, like rape, psychiatric comorbidity is the rule, not the exception.

Another common form of mental health comorbidity involves co-occurrence of substance-use disorders with PTSD (Kessler et al., 1995). Alcohol and drug use are a common form of coping with the significant distress and posttraumatic reactions that result from experiences of rape. Kessler et al. (1995) found that among individuals with PTSD, 51.9% were diagnosed with alcohol use/dependence, and 34.5% were diagnosed with drug abuse/dependence. Tabo (2011) reported that alcohol and/or substance use disorders were present in 18% of the victims after rape in his population within CAR.

F. Psychological Distress Without Formal Diagnosis

Inevitably, there will be survivors of rape who will not receive one of the above, discrete diagnoses. The absence of a formal mental health disorder after rape does not suggest total wellness for a victim, however. Almost all rape survivors manifest severe negative psychological consequences in the short-, medium-, or long-term. The psychiatric outcomes that fall outside formal psychiatric diagnoses are still considered marked and unwanted. Self-esteem and self-efficacy are severely affected by acts of sexual violence. In fact, a longitudinal study showed decreased self-esteem in rape victims when compared to non-rape victims a full 18 months after the event (Murphy et al., 1988). Evidence shows that human beings' psychological defenses are significantly affected after traumatic experiences (Edmondson et al., 2011). Interpersonal issues, anger, suicidality, and a lack of self-identity are all associated with sexual assault (Neumann, Houskamp, Pollack, & Briere, 1996) that may or may not be a part of a formal diagnosis.

IV. Physical Consequences of Rape

The short and long-term physical consequences of rape and other forms of sexual assault are profound and well documented. While some of these effects are visible and treatable through appropriate medical care, others are less so. For example, rape and other forms of sexual assault can cause lasting and deleterious changes to the human nervous system that can lead to pervasive and persistent cognitive, emotional, and behavioral difficulties.

A. Immediate Effects

The immediate physical effects of sexual assault are often the reason the victim seeks treatment initially. Adeyinka M. Akinsulure-Smith testified that the immediate physical consequences of rape include major physical damage to the reproductive and ano-rectal physiology, as well as pregnancies. She testified that muscle and bone damage can also occur. Headaches, muscle tension, nausea, and stomach problems are all mentioned as possible consequences. In a review of the literature on the physical trauma of rape, Sommers (2011) concluded that the posterior fourchette, labia minora, hymen, and navicularis are common areas where injuries are found in victims of sexual trauma. Heppenstall-Heger et al. (2003) examined ano-genital injuries in children due to sexual assault and other traumas. The authors found evidence of bleeding, anal abrasions, anal and perianal tears, and tears of the posterior fourchette and hymen. Bowyer & Dalton (1997), in studying female rape victims between the ages of 16 and 48, found perineal, hymeneal, and posterior vaginal wall tears. They also found cuts, bruises, and grazes on victims' labia majora, fourchette, vagina, and anus.

Injuries (e.g. bruises, cuts, grazes) reported by victims of rape have been evidenced in other parts of the body as well (Bowyer & Dalton, 1997). Out of 83 women who reported being raped, only 15 (18.1%) reported no severe physical injuries. The remaining women reported some combination of injuries to their arm (50.6%), thigh/upper leg (43.4%), neck (26.5%), breast/chest (20.5%), calf/shin/lower leg (19.3%), face/head (18.1%), back, knee (16.9%), shoulder (16.9%), hand (15.7%), and/or buttock (8.4%).

Long-Term Physical Consequences of Rape

Long-term physical consequences of rape are well known within the medical community. Rapes result in gynecologic fistula—a complete disruptive rendering of the woman's vagina and bladder and/or rectum (Bastick, Grimm, Kunz, 2007)—and chronic pelvic pain (Dossa, Zunzunegui, Hatem & Fraser, 2014; Mukanangana, Moyo, Zvoushe & Rusinga, 2014). This

latter study also found that survivors of sexual violence in the Democratic Republic of Congo (DRC) are more likely to experience a loss of interest in sex and in having children.

Women's reproductive systems are often severely and permanently damaged as a result of rape (Golding, 1996). Because women who have fistulas are more likely to be rejected by their community (due to incontinence and infertility), this adds to the psychological burden borne by survivors of sexual violence (Roush, 2009). For women, experiences of rape and sexual assault are linked to excessive menstrual bleeding, genital burning, painful intercourse, menstrual irregularity, and lack of sexual pleasure (Bastick et al., 2007). Rape can also result in infertility, which generates stigmatization as women may be viewed disparagingly by their spouses and by potential marital partners (Bastick et al., 2007). If women are not able to conceive, their value as a potential partner decreases (Bastick et al., 2007).

In addition, rape can result in sexually transmitted disease, including HIV/AIDS. Given that sexual assaults are violent and often lead to wounds with exposed mucosa, rates of disease transmission can be elevated, particularly with respect to HIV. During the Rwanda genocide of 1994, it is estimated that of the 500,000 women who were raped; over 70% contracted HIV (Reid-Cunningham, 2008 & Amnesty International, 2004). It may take years for HIV to transform into AIDS, and thus the estimate of women killed due to sexual violence in Rwanda continues to grow with each passing year. In the DRC, researchers estimate that when a woman is raped she has a 60% chance of contracting HIV (Brown, 2012). Because medical care and antivirals are often not available, the transmission of HIV is often a gradual death sentence in a post-conflict setting. Increased rates of cervical cancer from the Human Papillomavirus (HPV) acquired during a sexual assault have also been reported (Hynes, 2004). Dr. Akinsulure-Smith in her testimony reiterated this point. She testified that treating these infections in people with limited resources is problematic and is done under the backdrop of social marginalization and ridicule.

Psychiatric conditions caused by rape are related to deleterious physical outcomes. In women, the risk of arthritis and breast cancer is correlated with a history of sexual assault (Stein & Barrett-Connor, 2000). These risks increase among victims of multiple acts of sexual abuse (Stein & Barrett-Connor, 2000). PTSD has been linked to heart disease (Boscarino, 2008), chronic pain (Moeller-Bertam, Keltner & Strigo 2012), coronary artery disease, and higher mortality rates (Boscarino, 2011). There also appears to be some level of immune impairment

that occurs when someone is the victim of abuse, as women subjected to domestic violence are less able to resist the herpes simplex virus (Garcia-Linares, Sanchez-Lorente, Coe & Martinez, 2004).

B. Psychophysiological and Neurobiological Responses to Rape

Knowledge of the underlying physiological and neurobiological responses to extreme stress provides further support for the links between experiences of sexual assault and the negative, psychological, and physical outcomes described above. A review of the psychophysiology and neurobiology of trauma describes the mechanisms by which sexual assault and rape result in immediate and lasting consequences for victims. In particular, exposure to traumatic events, such as sexual assault and rape, activates the stress response system, namely, the sympathetic nervous system (SNS) via the hypothalamic-pituitary-adrenal (HPA) axis. The SNS is a division of the autonomic nervous system that regulates basic body functions and internal organs. Under normal conditions, the SNS is activated by the HPA axis to prepare the individual to respond to a stressor or challenge by releasing adrenergic hormones that serve to increase heart rate, dilate blood vessels in skeletal muscles, and dilate bronchi in the lungs, among other functions. The resulting function of the SNS is to trigger a "fight or flight" response that ensures the individual's survival in the face of threat or challenge.

However, in circumstances of extreme, chronic, or prolonged stress in situations in which the threat is inescapable (such as during and following rape or sexual assault), SNS activation does not result in the desired outcome (i.e., removal from threat or danger). Perceptions of helplessness or loss of control result in hyper-activation of the SNS and the stress response, stimulating increased HPA axis activation and prolonged release of the adrenergic hormones (e.g., adrenaline) that are known to be toxic to psychological and physiological systems when secreted in large amounts (Bremner, 2006; Gunnar & Vasquez, 2001; 2006; McEwen, 2007; Sapolsky, 2005, 2012). Research initially conducted with mice, rats, guinea pigs, and non-human primates has demonstrated the lasting consequences of stress exposure on HPA axis functioning and neurobiological development (for review, see Bale, 2015). These findings highlight the basic mammalian biological response to stress and trauma and have since been translated to humans. Research indicates that approximately $^{2}/_{3}$ of children and adults exposed to trauma demonstrate increased adrenergic activity (DeBellis, Keshavan & Clark, 1999; DeBellis, Lefter & Trickett, 1994). For this reason, a sense of loss of control and helplessness in the face

of a threat or stressor is one of the critical factors that leads to negative psychological and physical outcomes.

Acute stress corresponds with the release of cortisol, which helps modulate the biological stress response; however, individuals experiencing distress following trauma demonstrate alterations in cortisol activity. In some cases, individuals exposed to trauma show heightened or hyperactive cortisol responses to stress, while others show blunted cortisol activation in response to stress (see Teicher & Samson, 2013, for review). In addition, research has shown that trauma exposure is associated with relatively low levels of baseline cortisol (Gunnar & Vasquez, 2001; 2006; Meewise, 2007; Trickett, 2010; Walsh, 2013). These patterns of altered cortisol activity are indicative of lasting dysregulation and difficulty in modulating the stress response. The coupling of increased adrenergic responses and dysregulated cortisol activity results in indiscriminate fight or flight reactions and impaired autonomic functioning. Under normal conditions, the SNS operates in constant balance with the parasympathetic nervous system (PNS), which initiates physiological responses occurring during resting states (e.g., digestion). Rhythmic, regular fluctuation in SNS and PNS activation helps to maintain allostasis—a state of balanced, dynamic fluctuation in physiological systems. However, prolonged activation of the HPA axis and the SNS (such as that which occurs during and after experiences of rape and sexual assault) disrupts the allostatic balance, resulting in "allostatic overload", which is the dysregulation and disruption of physiological systems that leads to pathophysiological states and negative physical and mental health outcomes (McEwen, 1998; McEwen & Wingfield, 2003; Sapolsky et al., 2000; Boyce & Ellis, 2005; Herbert et al., 2006).

Dysregulation of autonomic nervous system functioning and allostatic overload result in both immediate and lasting negative effects for the individual. Along with the dysregulation of physiological systems described above, activation of the stress response following experiences of trauma (such as rape and sexual assault) is associated with changes in neurological functioning (Bale, 2015; Van der Kolk, 2006). Once again, initial research showing that animals exposed to severe stress experience functional and structural changes in the brain (that correspond with impairments in cognitive functioning) has been translated to human populations (Bale, 2105). In humans, an initial neurophysiological response to threat or stress involves the "shut down" of higher-order neural systems that normally serve a regulatory capacity (Damasio, Grabowski, Bechara, et al., 2000). The prefrontal cortex of the brain is involved in executive functions that

monitor, regulate, inhibit, and organize the otherwise automatic responses of lower-order brain and body systems. Prefrontal cortical areas therefore perform a crucial role in maintaining awareness and regulation of emotional and behavioral responses and are particularly relevant for social and interpersonal interactions. Activation of the SNS during the stress response is associated with reduced activity in prefrontal cortical regions.

While this shut down of prefrontal cortical regions serves an adaptive function of preserving resources in the face of threat or danger, this leaves lower order neural structures unregulated and disorganized. For example, the limbic system is the set of evolutionarily older brain structures that are implicated in the experience of emotions, reward, motivation, and some types of memory formation. Structures in the limbic system are known as the "fear circuit" because of their role in responding to danger. Normally, prefrontal cortical areas serve to regulate limbic function, however, reductions in frontal lobe activation during experiences of severe stress and trauma result in unregulated emotional and behavioral responses and patterns of learning.

These patterns of activation have lasting effects on brain structure and function. For example, trauma exposure has been linked with reduced volume of some prefrontal cortical areas (Teicher & Samson, 2013). In addition, the amygdala—a prominent structure in limbic system and the fear circuit—has been shown to have enhanced reactivity or hyper-responsiveness in connection with emotional stimuli in individuals exposed to trauma (Teicher & Samson, 2013). Even in resting state, non-trauma situations, individuals with posttraumatic stress symptoms show lasting spontaneous activity in limbic structures (amygdala, anterior cingulate gyrus), which is accompanied by reductions in activity in prefrontal cortical regions (Yen et al., 2013). In ideal conditions, these limbic (emotional) and prefrontal systems operate within a balanced feedback loop. However, a consequence of traumatic stress is a sensitization process in which limbic responses dominate neural functioning, leaving the individual in a prolonged alarm state that "hijacks" his or her psychophysiology. The weakened connection from the prefrontal cortex to the limbic system impairs the individual's ability to "re-set", that is, turn off the alarm and re-establish psychophysiological balance.

Dysregulation of neural systems can have lasting effects, including alterations in the volume of prefrontal and limbic structures and lasting changes in patterns of activation and sensitivity of specific brain regions (Bremner, 2006). Consequently, the changes in brain

structure and function that are associated with traumatic stress exposure can result in the cognitive, emotional, and behavioral difficulties that constitute the symptoms of disorders such as PTSD, depression, anxiety, dissociation, and so on.

Furthermore, the release of neurotransmitters and hormones involved in the stress response alters patterns of memory formation (McGaugh & Hertz, 1972; Cahill & McGaugh, 1998). Memories formed during traumatic experiences are often more vivid and visceral (due to the impact of adrenaline secretion on memory formation) but are also formed in the context of disintegrated and dissociated functioning and communication across neural systems. The result is that, when reminders of a traumatic experience (images, sounds, sensations) activate the trace of the memory, the individual returns to the disorganized, dysregulated state that she or he experienced at the time of the trauma. Again, this state involves reduced prefrontal activation, unregulated limbic activity, and overstimulation of the stress response system. In this way, the experience of trauma is often "re-lived" or "re-experienced" repeatedly in the life of a victim, even when she or he has returned to a relatively safe and stable environment. That is, even when safe, victims of rape and sexual assault may have conditioned psychophysiological and neuroendocrine responses to reminders of the trauma. These "re-experiencing" events involve a cyclical and potentially exacerbating activation of the stress response system that corresponds with lasting physical, psychological, and social consequences.

The stress response involves release of biological "stress-signals" including catecholamines, glucocorticoids, and pro-inflammatory cytokines. Previous research shows that sexual assault and abuse corresponds with higher catecholamine activity, elevated levels of pro-inflammatory cytokines (DeBellis, 1996; Kendall-Tackett, et al., 2007). In turn, heightened activity and unregulated secretion of these proteins and hormones is the mechanism by which trauma and stress exposure results in negative health outcomes such as obesity, cardiovascular disease, cancer, coronary problems, metabolic disease, etc.

V. Broader Sociological and Psychological Consequences of Rape

The consequences of rape and other forms of sexual assault do not stop with the immediate victim. Rather, there are broad and far-reaching psycho-social consequences that can impact the people around the victim—including his or her children, family, and community. The trauma symptoms that are seen in individuals following experiences of sexual assault and rape

can also be present at the systemic or community level. Just as the individual can become dysregulated, destabilized, and debilitated by trauma, communities and social systems suffer similar consequences: organizational structures break down, safety and stability are threatened, and the system becomes reactive and repulsive (Bastick et al., 2007).

A. Isolation of, and Long-Term Effects on, the Victim

Women who have survived sexual assault may be considered indelibly defiled, especially in societies in which the perception of "sexual purity" is corrupted by the stigma of rape (Tabo, 2011). Because the avoidance of reminders of the trauma is a key component of PTSD (Zalihic-Kaurin, 1994), spouses, family members and entire communities may shun, abandon, or even exile the victim of sexual assault. This stigmatization is not merely a theoretical and abstract concept. It is real with severe consequences. Indeed, it is not unheard of for death at the hands of the community to be a victim's punishment for being raped (Bastick et al., 2007). At a minimum, this physical or emotional exile may leave women economically vulnerable, left to find their own resources for themselves and their children.

By way of comparative example, many survivors of sexual assault during the Rwandan genocide were rejected by their communities and suffered isolation so severe that some have called it "social death" (Hynes, 2004). Researchers have documented the same severe psychological distress arising from stigmatization in DRC survivors of sexual assault (Verelst, Schryver, Broekaert & Derluyn, 2014). Similar circumstances occurred in Darfur as well (Wax, 2004).

B. Risk of Re-traumatization & Re-victimization

Individuals who are the victims of sexual assault and rape not only experience distress related to these traumas, but are also at greater risk for future re-victimization (Breitenbecher, 2001; Classen, Palesh & Aggarwal, 2005). In a study of women who had been physically and/or sexually abused, the women who were abused were 1.99 times more likely than non-abused women to experience sexual re-victimization and were 1.96 times more likely to experience physical re-victimization (Barnes, Noll, Putnam, & Trickett, 2009). The inability to focus, function in activities of daily living, and care for oneself as seen in survivors with PTSD, depression, and other forms of extreme mental anguish is often exploited in the aftermath of the assault. For example, the incidence of further rape, prostitution, abduction, and human trafficking of Iraqi women and girls has risen dramatically after the fall of Baghdad (Hynes,

2004). In Bosnia-Herzegovina, the number of women and girls trafficked into prostitution is estimated to be around 10,000 (Robson, 2002). After the 1971 civil war in Bangladesh, so many women were rejected by their families that the state sponsored working skills classes to help women avoid having to resort to work in brothels (Brownmiller, 1975). Researchers have documented that women and children in the conflict-ridden areas of Colombia remain targets of sexual exploitation (Wirtz, et. al., 2014). Post-conflict sexual exploitation is so widespread and damaging that Spangaro, et al., have recently reviewed initiatives that seek to reduce sexual exploitation in the often chaotic post-conflict environment (Spangaro, Adogu, Ranmuthugala, Davies, Steinacker & Zwi, 2013).

C. Increased Incidence of Suicide

In addition to inducing PTSD and other forms of psychological distress, sexual assault can lead to increased rates of suicide in affected individuals. This can be appreciated in populations after mass rape. As an historical example, in 1937, as Japanese forces arrived in the Chinese provisional capital city of Nanking, they committed brutal sexual violence against the civilian population (Brackman, 1987). It has been reported that approximately 20,000 cases of sexual assault occurred in Nanking in the first month alone (Friedman, 1972). By the end of the occupation, it is estimated that approximately 80,000 rapes occurred (Chang, 1997). Suicide rates soared in 1937-1938 in part as massive numbers of Chinese women ended their lives by jumping into the Yangtze River (Heit, 2009; Chang, 1997). Similar dramatic increases in the incidence of suicide also occurred in Bangladesh after the 1971 war of liberation left over 400,000 women and children with psychological distress from sexual assault (Brownmiller, 1975). The widespread sexual assault and abuse suffered by Iraqi women in the aftermath of the 2003 invasion of Iraq has led to greatly increased rates of suicide (United Nations Assistance Mission for Iraq, 2008; Lee-Koo, 2011).

D. Unwanted Pregnancy

Sexual assault can lead to unwanted pregnancies. Survivors who become pregnant are often left with the options of having a non-medical abortion or having a child who will serve as a constant reminder of the rape. During the pregnancy, women may experience greater incidents of backaches, constipation, pelvic girdle relaxation, heartburn, nausea and vomiting, edema, urine incontinence, urinary tract infections, leg cramps, and Braxton Hicks contractions (Lukasse,

Henriksen, Vangen, & Schei, 2012). Among women who were sexually abused as a child, pregnancy exams can cause distress, and flashbacks during pregnancy is common (Wilson, 2011). Incidents of attempted or completed sexual assault are also linked to post-partum depressive symptomology (Ryan et al., 2014). Death is also a consequence as the World Health Organization (WHO; 2007) estimated that 35,900 women died from unsafe abortions in Africa alone. In middle Africa, an estimated 880 out of every 100,000 unsafe abortions resulted in death (WHO, 2007). The risk taken by these women may be a direct reflection of the stigma they may endure if they keep the child.

Women who become pregnant following incidents of rape may face the scorn of their community (Thomas, 2007; Akinsulure-Smith, 2014). The child can become a reminder of the trauma suffered by the entire community, and some have postulated that traumatized societies will reject the sexually-assaulted woman and any child she conceives because they serve as constant reminders of the harm caused to the community (Reid-Cunningham, 2008). This phenomenon was particularly prominent in Bosnia-Herzegovina. Rape camps were established where women were repeatedly raped until they became pregnant (Boose, 2002). After reaching the late stages of pregnancy, the surviving women were bussed back to their communities with the announcement that a Serbian baby would soon be born (Seifert, 1994). This led to some women being shunned, further humiliated, and in some cases killed. When the women elected to have an abortion, the majority of these abortions were preceded by suicidal thoughts (Loncar, Medved, Jovanovic, Hotujac, 2006). Likewise, at least 25,000 women were estimated to have become pregnant after being raped during the Bangladesh war of liberation. The rates of infanticide, suicide, and self-administered abortions were so dramatically increased in Bangladesh that both International Planned Parenthood and the Bangladesh Central Organization for Women's Rehabilitation opened clinics to try to stem the time of suicide and medical complications from self-directed abortions.

E. The Impact of Sexual Assault on Children

The deleterious impact of rape on children—in terms of the child's psychology and development—cannot be overstated. Felitti, et al. (1998) studied children who experienced adverse life events (e.g., different types of abuse, living with violence, or living with the mentally ill) as a child. They found that problematic experiences as a child were related to increased smoking, alcoholism, drug abuse, depression, suicide attempts, sexual partners,

sexually transmitted diseases, obesity, and decreased exercise as an adult. Ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease were all associated with these problematic experiences as well. Child victims of rape are also at risk of re-victimization. Past studies have demonstrated significant increases in rates of adulthood victimization among women who were raped as a child as compared with women who were not (Roodman & Clum, 2001). Indeed, women who were raped as children have a higher likelihood of being raped in the future (Roodman & Clum, 2001). The impact of sexual assault and experiencing trauma vicariously through a member of one's family may result in problems in adulthood.

The rape of a child can also adversely affect the mother in significant ways. Manion et al. (1996) reported on the consequences of such assaults on children and, not surprisingly, found that psychological well-being, satisfaction of being a mother, and family functioning among mothers who had a child who was raped was less when compared to mothers who did not have a child suffer from sexual abuse. Fathers experienced similar injury to their psychological well-being. The sexual assault on a child can thus serve to terrorize the parents.

F. The Destruction of Relationships

At a very basic level, beyond our needs for shelter, food, and water, human beings are also social creatures who rely on our attachments with each other for our general well-being (cf. John Bowlby, 1969). We define ourselves through others and through our positions within our society. Our identity is based on our interactions and the cultural strongholds we feel are important. Sexual violation can destroy this identity and the capacity for normal relationships.

The psychological changes that occur post rape can be so severe that survivors of sexual violence may experience extreme difficulties when it comes to occupational functioning, social relationships, and parenting. These same difficulties are known to manifest on a community level as well as on the individual level (Field, 2011). Increased rates of mental health pathology in individuals creates impairment in community functioning (Reicherter & Aylward, 2011). Traumatized populations tend to have increased rates of domestic violence compared to pre-conflict rates. For example, 75% of Khmer women experienced domestic violence in the post-conflict years—an exponential increase compared to pre-war rates (Rehn & Johnson Sirleaf, 2002).

G. Effects of Trauma on Parenting

The ability to effectively parent children is also strongly impacted by PTSD and depression. Parents who are depressed and suffering from PTSD are not able to comfort their children, are more likely to ask children to take on an adult role, are less likely to bond well with their children, and are more likely to abuse and neglect their children (Field, 2011). There is strong evidence that the ability of children to heal from trauma is closely linked to the mental health of their mother (Smith, Perrin, Yule, Rabe-Hesketh, 2001). In another study of survivors of the Bosnia-Herzegovina conflict, childhood rates of PTSD were high and related to the type and amount of trauma experienced (Smith, Perrin, Yule, Hacam & Stuvland, 2002). These societal-wide manifestations of trauma (for example, the impact on parenting) have been shown to occur repeatedly in traumatized populations, and there is every indication that victims of sexual assault with PTSD and depression will exhibit the same patterns of dysfunction on a societal level given the sheer number of times this phenomenon has been observed (Van Schaack, Reicherter, Chhang, & Talbott, 2011).

In post-conflict Colombia, intergenerational patterns of violence emerged as women reported intimate partner violence repeating for generations. Women often stay in violent relationship in post-conflict regions as economic disparities offer few options for women outside of sex work or marriage (Wirtz et al., 2014).

H. Intergenerational Transmission of Trauma

Clinicians and physicians have long noted the presence of heightened levels of distress and psychopathology in the children of victims of trauma, even when the children themselves were not exposed to traumatic stress. These observations led scientists to investigate the mechanisms by which traumatic distress is transmitted inter-generationally from a traumatized (or trauma-exposed) individual to their children. Research has confirmed that parental trauma exposure corresponds with increased risk for PTSD, mood disorders, and anxiety disorders in children (Yehuda, Halligan, & Bierer, 2001; Yehuda et al., 2015). Furthermore, the neurobiological and psychophysiological alterations associated with PTSD and traumatic distress reviewed above have also been observed in the children of victims of trauma (Yehuda et al., 2015). While the impact of trauma on relationships and parenting (discussed above) may contribute to the increased rates of posttraumatic stress and alterations in neurobiology observed in children of trauma victims, research has now shown that parental trauma exposure affects the expression of that individual's genetic code (i.e., epigenetics; Yehuda et al., 2015). Past research

has demonstrated that environmental influences such as stress exposure can "reprogram" the genetic blueprint for the development of neural and biological systems in rats and mice; these changes in the blueprint are subsequently passed on to the offspring (Bale et al., 2010; Bale, 2015). These findings have more recently been translated to humans, as parental trauma exposure has been found to alter how the genes that code for the psychophysiological stress response (e.g., release of glucocorticoids) are regulated both in the trauma-exposed individuals and in their children. These findings reveal how exposure to trauma such as sexual assault and rape can alter the biology both of the individual victim and their children, providing a biological explanation for the intergenerational transmission of trauma and traumatic stress. We can expect that the acts of rape and sexual assault that were committed in the CAR will correspond with alterations in the biological stress response (which subsequently influences psychopathology and functioning) both in current victims and in future generations, therefore underscoring the pervasive and lasting impact of the crime.

I. The Destruction of Community

One of the core symptoms of PTSD is avoidance of places where the trauma occurred or other reminders of the trauma (DSM-5). The perpetrators of mass rape may induce within a victim and her/his family and community a chronic psychological phenomenon so marked that they are incapable of returning to their prior home without experiencing severe mental anguish. This can lead to the disintegration of the community as survivors flee the area where they were assaulted (Bastick et al., 2007). Therefore, the territory in which the victims once lived is taken from them psychologically as well as physically (UN Security Council Resolution 1820). This, in turn, can lead to a loss of resources as a campaign of terror prevents people from gathering their possessions and basic items before they leave. Indeed, a majority of the crimes documented at Bangui took place in the victim's home (Tabo 2011). This is a direct insult to the individual's sense of safety and comfort.

Another example is found in Bosnia-Herzegovina where mass rape led to mass relocation following the disintegration of the former Yugoslavia (Reid-Cunningham, 2008). It has been estimated that up to 50,000 women were systematically raped during the war (Boose, 2002). Muslim women were brutally assaulted in public areas in ways that terrified the entire Bosnian Muslim community. This led to large numbers of people being traumatized at once and a subsequent reluctance to return to these traumatic areas that they once considered home, even

after the conflict ended (Zalihic-Kaurin, 1994). A study determined that for the Bosnian population, even after 3 years had passed, 45% of the survivors with PTSD, depression, or both continued to suffer from these disorders, and 16% of previously asymptomatic people had developed the disorders (Mollica et al., 2001).

VI. Testimony of Victims from *The Case of ICC Prosecutor v. Jean Pierre Bemba Gombo*

Multiple victims provided witness testimony throughout the court's proceedings. Included in this testimony were impact statements that detailed both the physical and psychological trauma that resulted from rapes and other crimes committed by Bemba's soldiers. These impact statements referred to either the witnesses themselves or events to which the witnesses were privy. It is important to note that the physical and psychological trauma that is highlighted in the literature and throughout this report is congruent with the testimony that was presented in court. Many witnesses discussed members of the community "falling ill" after being attacked and/or witnessing family members being attacked (Witness 73, 80, 119), but whether this was due to physical or psychological symptoms is unknown. Below are excepts from witnesses' testimony that highlight how this report corresponds to the trauma these victims suffered.

A. Physical Trauma

As a result of rape, physical injuries and diseases were common in witnesses before the Court. Witness 22 and 69 testified that victims had been diagnosed with HIV/AIDS after being raped by Bemba's soldiers. Witness 22 reported having a miscarriage. Witness 81 stated that, "up until now I have not been able to get pregnant," and Witness 80, while discussing one of her daughters, stated that, "she has problems conceiving."

Multiple witnesses reported bleeding and pain in and around the vaginal area. Witness 68 testified, "I met up with problems with my stomach. I had a lot of pain. I went to hospital. I was examined. There were ultrasound examinations. My spleen swelled up and I felt a lot of pain in my stomach after these events." [redacted] Witness 82 stated, "I had a lot of injuries in my vagina. I had serious injuries in my vagina." When describing helping underage girls after they had been raped, Witness 119 stated "blood was flowing from their vaginas." Witness 81 stated that she had an "infection." These physical ailments were not confined to the pelvic area, however. Witness 79 testified that: "Since those events, I am not in a good state of health. I developed different

types of illnesses. I even contracted high blood pressure. I even suffer from gastric problems, from hypertension, and it's following these events, since these events I'm not enjoying a good state of health."

Men were victimized as well. "Yes, after the beating I took my back is not good. I have pain in the -- in my back. If I sit down and I want to stand up, I have pain. I have back pain after falling over," stated Witness 112. Witness 69 stated, after being beaten and raped by Bemba's soldiers, "I have tears streaming from my eyes on a permanent basis ... I am still suffering terrible pain in my eye and when I start talking it's as if my eye wants to come out of its orbit." Additionally, as a result of the rape, his "anus was ripped apart."

B. Symptoms of Psychological Trauma

As discussed above, the DSM-5 outlines clearly defined symptoms of trauma, such as depression, hypervigilance, and change in cognitions. Victims' testimonies are congruent with these conceptualizations of a traumatic response. Witness 22 articulated a desire to commit suicide. She also described anhedonia (the inability to feel joy) and negative cognitions, both symptoms of PTSD, stating, "I could not want to have any sexual relationship during that time." A physician stated that "she presented with severe post-traumatic stress disorder … [including] sadness [and an] overall sense of pessimism and inhibition."

Witness 29 also described a negative mood: "they really committed atrocities, which heavily affected many families. They did say that the Banyamulengue were committing rapes on men, on women, and that they're also telling them to undress in front of their children or spouses, and this was very sad. Everybody in the sector was very sad." She went on to say "Those victims are already dead. Some are still alive and they still live in sadness." [redacted] Witness 119 spoke of a similar emotional response: "I'm sad, I'm angry, [redacted] When I think that the Banyamulengue had carried out these violent attacks on the people, I was very, very sad. Very, very sad." She went on to say, "The Banyamulengue killed that woman's son and this woman didn't see her son's body, which means that that particular woman cried for a long time and she also died." [redacted]

[redacted]

Victims experienced hypervigilance, fear, and trouble sleeping, cardinal symptoms of posttraumatic stress. Witness 110 stated, "well, if you hear gunshots here and there, you wonder, you wonder whether you will sleep well, whether you will wake up in the morning. Those are the kinds of fears that you have." Male witness 112 stated, "At that time it was not possible to go to the hospital. Everyone was afraid, and no one was going to work there." Witness 119, who was raped along with her mother and 11-year-old daughter, stated, "I have nightmares at night. I suffer from all types of illnesses. I live in worry, in a state of worry. I'm troubled. I don't know. Now, I know that I'm not right in my mind. I've got psychological problems." Witness 68: "My spirits and my mental state are poor. I have a tendency to depression, and when I see a soldier, or a man with a weapon, I'm afraid. Even on public transit I am very, very afraid even today." She went on to say, "At first I had nightmares. I would re-experience the events and I slept poorly."

C. Shame and Isolation

One of the main theses in this case is that Bemba's soldiers attacked, pillaged, and, in particular, raped members of communities within CAR in order to promote fear, terror, and to destabilize the community. By using communities' cultural norms against them, Bemba's subordinates were able to isolate and intimidate vulnerable members of the community, such as women and children. After being raped, women were no longer considered to be worthy of marriage and starting a family. This shame resulted in isolation of themselves and members of their family.

Multiple witnesses described a feeling of shame for what had happened to them, despite the fact they were forced to have sex with Bemba's soldiers. Witness 69, a male, stated "Maybe in their country no distinction is made between a man and a woman; however, in the Central African Republic this is taboo. This is an unknown entity. It is the Banyamulengue of Mr. Bemba who brought this practice to our country and today, today people make fun of those who were victims of rape. Mr. Bemba humiliated us. We no longer have any values in the Central African Republic." He went on to say, "Prosecutor, Bemba's men completely humiliated us, ridiculed us. We don't have any respect or dignity in the Central African Republic any longer. When I felt overwhelmed, I also fled. I was moving around like a dog. I was going away, coming back,

going away again and coming back in order to observe what was happening in my locality. I could not be stable. We lost our dignity. We were subjected to humiliating and degrading acts. I am asking myself questions. What are we going to do? My wife and myself were subjected to atrocious acts. We no longer have any value. We are wondering what we are going to do in order to recover our dignity."

Remaining a virgin until marriage and being monogamous in a marriage are both important cultural values to the communities referenced in the trial. This cultural value was exploited by Bemba's men through rape resulting in shame. Witness 79 described a scene she saw, wherein the underage girls were being raped: "She was screaming. The two of them were screaming. They were saying, 'Mother, I'm dead. I'm dead. They've killed me. I'm dead.'" The girls may have been referencing how their place in society had effectively been ruined. She went on to say, "In most cases, people were ashamed. They were ashamed to talk about these events, particularly the men. They were not very willing to talk about what happened. There were several similar cases. For example, there was one lady who was living in my neighbourhood; she's no longer alive. After those events, well, I didn't see her rape. The Banyamulengue raped her, many of them did, and after they left she was not able to go about the neighbourhood. People made fun of her. They would call out, 'Banyamulengue's woman. Wife of the Banyamulengue.' She fell ill and she went away to die elsewhere. There were many such cases." Witness 80 described her own experiences of shame, "But if you are walking by and everyone stigmatises you, for example, myself, when I pass by, people will say 'Look at a big lady like that who had herself raped by the Banyamulengues and even her daughters were raped by the Banyamulengues.' I hear all of that when I'm walking by." Witness 81 stated, "After those events, we were ostracised. The young boys would insult us, point us out, and I had to take refuge in Sibut." Witness 42 describes his situation with his daughter, "I continue suffering as a result of what happened to us. They raped my daughter while they were taking her away. After she had been released, I did not have the courage to go and see my daughter. It is her mother who went and saw her. She was covered in blood and she said, 'Look at what the Banyamulengues have done to this child.' I asked her, 'What?' And she said, 'Look, they have done a very bad thing to her.' I was there and I was crying, and each time that I remember these things and I start talking about them, I have tears in my eyes. As you know, my daughter was ten years old. She could no longer go to school, because she was stigmatised at the school. The other pupils were

making fun of her - that is, the Banyamulengue's wife, and so on and so forth - so she dropped out of school because of that. I could not do anything. I allowed her to continue like that. So I am very disappointed. I'm very upset. If she had continued with her studies, maybe she could have become an authority. Maybe she could have become someone important today."

Maintaining virginity before marrying is a cultural value and losing virginal status, even if through rape, produces a loss in self-worth. Witness 42 described how she felt about her daughter's experiences, "As far as I'm concerned, I would consider that a useless procedure. Even if I took her to see a doctor, would she recover her virginity? I don't think so. So, it would be better to leave it be. That's why I felt that it was not worth taking her to hospital." She continued later, "Even if I had money, given what they had done, I was very upset. I couldn't. I wouldn't agree to it. I was very upset. What would taking her to hospital change for my daughter's life? Would hospital help her to recover her virginity? I really don't think so. What would be the point of taking her to hospital? What would be the use?" Witness 82's experiences: "Given that I was assaulted, I am no longer able to associate with the other girls. Everybody makes fun of me. Even though I have a baby, even though I carried a baby, [m]y first partner abandoned me with the baby because of all that."

Being abandoned by one's partner was not uncommon after the rapes. While fear of disease was present, shame by association also existed. [redacted] Witness 80 described a similar situation, "Since they were assaulted and raped by the Banyamulengue, people are afraid of them because they do not want to contract any diseases." Witness 81 touched on the abandonment due to one's partner feeling shamed, "After what happened to me, he took all my children. He said that he wanted to go away and not return, and that's the situation to this very day. He wanted to go to five kilometers away." She continued later, "After he left, he never came back."

The evocation of shame and fear, both as a result of terror, was by design. Unfortunately, to some degree, it worked. Witness 119: "… I would like to say that when the Banyamulengue came, their coming was dreadful for the local population. There were sons and daughters of my

country that died, strong men, necessary men for driving the development of the country. There have been orphans left. There have been divorces, because the Banyamulengue raped women and, given those state of affairs, the husbands preferred to divorce. There were families that have broken apart. What we had to suffer in our neighbourhood, I think the victims' representative - well, I think there are a number of people who aren't brave enough to tell that they were raped by the Banyamulengue." Witness 112 testified that "the situation was one in which it was every man, every woman for himself or herself, and that is how the inhabitants left our neighbourhood."

VII. Comparative Studies

A number of studies have been conducted in situations in which rape was committed on the scale seen in the CAR; all reveal the constellation of individual, familial, and communal impacts described above. For example, in the DRC, gender-based and sexual violence have been occurring for over a decade in the context of ongoing conflicts. Researchers have investigated the prevalence of PTSD and depression and found that in 2010, the prevalence of depression was 41% and that of PTSD was 50% (Johnson et al., 2010). It has been reported that 91.5% of survivors had one or more rape-related physical or psychological problem (International Alert, 2005).

Liebling and Slegh (2011) spoke with 76 DRC sexual assault survivors who became pregnant as a result of the assault, finding that 80% of the survivors were raped before the age of 18. Their families rejected the majority of them after the pregnancy was discovered, and nearly all of them were rejected by their communities. Some survivors even received death threats. The children born to survivors were nearly uniformly scorned and mocked, which led to depression within many of the children (Liebling, Slegh & Ruratotoye, 2012). In addition, mothers reported feeling ill-equipped to sooth children as they themselves may have been suffering from a particularly severe form of PTSD that is seen in women who become pregnant after rape (Bartels et al., 2010).

VIII. Prospects for Healing

It is important to note that while very few men and women who are the victims of sexual violence remain unaffected by this criminal act, it is possible for survivors to go on to lead meaningful lives after a sexual assault with psychiatric treatment (Tedeschi & Calhoun, 1995;

Tedeschi & Calhoun, 2004). The concept of posttraumatic growth (PTG) captures experiences of positive change that occur as a result of highly challenging or traumatic stressful life events (Tedeschi & Calhoun, 2004). PTG is a concept with roots in ancient philosophy regarding the potentially transformative power of suffering (Tedeschi & Calhoun, 1995), yet PTG as a phenomenon has also been supported in current empirical investigations. Research studies have shown that adherence to perspectives of growth and positive change following trauma and suffering is associated with improvements in psychological and physical health (for review, see Tedeschi & Calhoun, 2004). PTG takes place after traumatic experiences when the following changes are present or fostered: (1) a sense of new opportunity and new possibilities following suffering, (2) changes in relationships with others and increased sense of connection with others who suffer, (3) an increased sense of personal strength based on the ability to survive, (4) an increased appreciation for life in general, and (5) a change or deepening of spiritual beliefs. PTG often co-occurs with experiences of pain and suffering; therefore, even though the victims of sexual assault in the CAR suffer significant distress (including mental and physical pain as well as societal disruption), there remains an opportunity to foster healing, recovery, and growth for the individuals and communities affected by the crime. An optimistic outlook focused on growth and recovery following insult and trauma can be facilitated through education, medical and psychological treatment, reparations, financial assistance, and the execution of justice.

IX. Reparations

A. Forms of Redress

Reparations for commission of grave international crimes can be tailored to the particular need of victims (including nature of the trauma), given what is possible economically on site, and in light of cultural and country conditions. Clinical, legal, and other academic articles consistently recommend that at least five forms of redress be considered in the design and implementation of any reparations program:

1. Restitution: restoration to the condition before human rights violations, so far as is realistic;
2. Compensation: either individual or collective, including costs of medical and psychological damage;

3. Rehabilitation: provision of physical and psychological assistance and support to aid in recovery, including secondary forms of assistance such as job-training and micro-lending;
4. Satisfaction and Guarantees of Non-Repetition: public statements and public education about the history of the atrocity and the damages incurred, as well as the steps taken to prevent future repetition of the crimes;
5. Symbolic public acknowledgement of the violations: creation of memorials and/or public condemnation of the atrocity, other forms of commemoration, and acknowledgement of harm by an international criminal court (Redress Trust, 2003).

For example, all of these forms of redress were theoretically addressed in response to mass sexual assault in the nation of Croatia, as reported in the UNDP Policy Paper on Reparations for Croatian Victims of War, including medical and psychological support and assistance, legal aid, and monetary compensation for life from the State (UNDP, 2013). Various government ministries were charged with carrying out this program, including the Ministry of Health and the Ministry of War Veterans.

B. Comparative Redress of The Extraordinary Chambers in the Courts of Cambodia

The Extraordinary Chambers in the Courts of Cambodia (ECCC) implemented a 13 point reparation strategy to honor the victims of the Khmer Rouge regime. This plan, which was implemented after the conviction of Kheiu Samphan and Nuon Chea (Case 002/001; ECCC, 2014), included cooperation from the Royal Government of Cambodia (RGC) and other national and international organizations. An official National Day of Remembrance has been agreed upon by the RGC and multiple public memorial sites are scheduled to be built. The International Federation of Human Rights, Victims of the Khmer Rouge Genocide, and the Memorial for Victims of Genocide Committed by the Khmer Rouge all combined to create a place at the Great Pagoda of Vincennes in Paris, France, where people can gather in remembrance (ECCC, 2014b).

Efforts to allow for psychological healing are part of these reparations from the ECCC decision. The Transcultural Psychosocial Organization (TPO) will provide a structured way for individuals to give testimonials of their experiences under the Khmer Rouge. The TPO will also facilitate professionally-led psychiatric treatment in groups that provide coping skills meant to help individuals as they process their country's traumatic history (ECCC, 2014b).

Education around the events will be facilitated, as information will be updated in the *Teacher's Guidebook: The Teaching of A History of Democratic Kampuchea (1975-1979)* and a second edition of the Cambodian Human Rights Action Committee narrative story-telling book. Museums and interactive displays are both part of these reparations meant to help a country close a chapter defined by terror. Civil parties involved in the trial will be provided with a copy of court documents, and these materials will be made available to the public (ECCC, 2014b).

C. Reparations and Redress in the CAR Context

Despite barriers in CAR related to misinformation, stigmatization, and lack of resources, providing meaningful and specific interventions that address all five forms of redress can be achieved. Partnership with and support for programs through the Trust Fund for Victims and other non-governmental organizations operative in CAR provides a means by which reparations can be administered and redress can be achieved. In line with the five forms of redress discussed above, the Trust Fund for Victims provides assistance under the categories of physical rehabilitation, psychological rehabilitation, and material support (Trust Fund for Victims, 2014).

Physical rehabilitation directly addresses the medical needs of sexual assault victims and could include plastic, prosthetic, and orthopedic surgery (as needed); treatment of wounds and infections; treatment of sexually transmitted diseases and related consequences; and medical interventions to address the long-term physical consequences of rape, including heart disease, chronic pain, and impairment in immune functioning. In addition to direct medical services, physical rehabilitation efforts include the careful identification of those in need of care and the development of strategies to overcome barriers to receiving medical care. Addressing the physical and medical consequences of the crimes committed is a basic first step towards restitution, compensation, and rehabilitation.

Psychological rehabilitation includes education, social services, and therapeutic interventions to address the psychological consequences and psychiatric disorders that result from exposure to sexual assault and terror. Psychological treatment and psycho-social interventions are effective rehabilitation measures for the mental health symptoms commonly suffered by rape survivors (Regehr, Alaggia, Dennis, Pitts & Saini 2013; Resick et al., 2002; Foa, Rothbaum, Riggs & Murdock, 1991; Frank, Anderson, Stewart, Dancu, Hughes & West, 1988; Nishith, Resick & Griffin, 2002; Resick & Shnicke 1992; Rothbaum, Astin & Marsteller, 2005; Clark, Rizvi & Resick, 2008). Effective, evidence-based interventions for sexual assault

include cognitive-behavioral therapies such as cognitive processing therapy and prolonged exposure treatments (Regehr, Alaggia, Dennis, Pitts & Saini, 2013; Foa, Rothbaum, Riggs & Murdock, 1991; Resick & Shnicke, 1992). However, mental health treatment and psychosocial interventions can take many forms and should be tailored according to cultural and contextual needs and values. Similar to physical rehabilitation efforts, psychological rehabilitation requires careful efforts to identify those in need of psychological support as well as efforts to reduce barriers, including efforts aimed at reducing stigma around mental health difficulties. As reparations for the crime of mass rape, it will be important to develop and deliver culturally-sensitive mental health interventions with the primary aims of (1) promoting psychological healing and growth and (2) restoring and improving daily functioning and quality of life.

While psychotherapeutic interventions can be of great benefit, there are numerous barriers to implementation. Even if these barriers are overcome, psychotherapy does not address all facets and consequences of mass criminality or the emotional suffering of the individual and community. Even in the West, such therapies are often only partially successful at modifying or controlling trauma symptoms. In the Croatian setting, for example, there was concern that those attending such programs experienced greater stigma within their communities (UNDP, 2013). State resources, including established institutions and adequate funding, are not widely available in the CAR. It may be difficult to make the funds and exceptional training necessary to respond to circumstances of mass rape of women available in CAR (Fischman, 2014). In fact, one source working with survivors of rape in a neighboring state asserts that the provision of inadequate psycho-social services can actually be damaging, with PTSD and major depression increasing because "treatment" was carried out by undertrained non-professionals (with one or two weeks' training by visiting clinicians) (Steinberg, 2014). Accordingly, psychotherapeutic interventions must be carefully implemented with experienced professionals.

Material support focuses on improving the economic status of individuals and communities affected by the crimes, and can include micro-financing for victims. Such supports can occur through education, economic development, rebuilding of infrastructure, and development of employment opportunities. While generally outside the scope of the current report, efforts to provide material support help to restore a sense of safety, stability, and normalcy within a community that consequently helps to structure and regulate the functioning and daily activities of individuals and families whose lives were destroyed by the crimes.

Material supports can re-establish the value of survivors to their family and community. In this way, the provision of material support has the psychological impact of restoring hope, increasing optimism, and promoting independence, recovery and growth.

As a particular form of material reparation, microfinance opportunities can re-establish the value of survivors to their family and community. In societies experiencing large-scale rape and other human rights violations, economic assistance through micro-loans offer an opportunity for women to avoid poverty, but also to avoid having to remain in abusive domestic settings that often follow mass atrocity (especially rape) or to enter the sex trade to survive (Steinberg, 2014). One risk, however, is that microfinance money is either stolen by the authorities that are given administrative control over it (including churches or government agencies) or is diverted to other public uses, e.g. for transportation (Steinberg, 2014). With appropriate protections against these contingencies, such programs address the imperatives of restitution and rehabilitation. This may also be the least expensive way of implementing proposed reparations in some societies without the infrastructure to support large-scale psychosocial programs.

Physical rehabilitation, psychological rehabilitation, and material support all involve and require educational efforts and campaigns. In particular, efforts to provide education about the impact of sexual assault can help to reduce stigma and improve understanding of the physical damage, the psychological consequences, and the material needs of victims, their families, and their communities. Educational and informational campaigns can help to reduce blame that may be directed towards victims. Educational campaigns can also be used to provide and reinforce guarantees of non-repetition and to provide symbolic public acknowledgment of the crimes. The responsibility of a defendant in the commission of the crimes (and resulting consequences) could be publicly and officially acknowledged so that the victims, families, and communities affected by the crimes do not shoulder the blame. Educational campaigns can facilitate the exploration of cultural views on rape and sexual assault, potentially leading to a reframing of judgments that victims have been "damaged." Such efforts and changes in perspective serve to prevent the further suffering of victims, such as the 22 women at Bangui Hospital who stated that their divorce was a direct result of their rape. Furthermore, fostering community understanding of the purposes of crime (i.e., to elicit terror, fear, and destabilization), may help to motivate reparative and rehabilitative action at the community level in effort to prevent the criminals from achieving their goals.

Efforts described above have taken place in Uganda and the Democratic Republic of the Congo (Trust Fund for Victims, 2014) in order to address war crimes and atrocities that have taken place in these countries. These efforts may serve as a model for measures to be taken in CAR, and, at the very least, successes of programs such as The Trust Fund for Victims in Uganda and the DRC provides hope and inspiration for the reparation, redress, and future growth that can be fostered for the victims of sexual assault and terror in CAR.

X. Conclusion

As detailed in the current report, when left untreated and unaddressed, the consequences of crimes of mass rape and terror such as were committed in CAR during 2002-2003 are devastating, pervasive, and long-lasting for individuals and communities across multiple generations. However, it is also clear that with intervention, reparation, and redress, the negative impact of the crimes can be mitigated, individuals and communities can be healed and rehabilitated, and new opportunities for growth can be fostered.

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Personal communication with Dr. Yael Fischman, PhD, Palo Alto, California on 11/12/14

Personal communication with Prof. Richard Steinberg, JD, PhD, Stanford University, California on 11/12/14. Professor Steinberg's caveat on the use of finance addresses the concern of diverted funds. He personally found a way around this by carefully choosing a local administrator he knew; presumably this can be done area –wide—see note (6) below.

Personal communication with Sister Marilyn Lacey, Executive Director, Mercy Beyond Borders, Palo Alto, California on 11/13/14. MBB operates in Haiti and South Sudan; the latter experience revealed diversion of funds by male officials of the Catholic Church. Sister Marilyn suggests administration of microfinance in Africa by the women who are nuns in various orders, on behalf of women victims of rape.

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