Invisibly Wounded Warriors:

The Psychological Repercussions of War

On American Soldiers

By: Maisy Bragg

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ABSTRACT:

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ADVISOR: David Cotter

The demands that come with war can be both physically and mentally traumatizing and damaging to the soldier in many ways. These psychological injuries manifest themselves in what physicians call Posttraumatic Stress Disorder. The purpose of this paper is to examine Posttraumatic Stress Disorder in American Soldiers by analyzing the training methods, human's natural aversion to killing, pre-deployment medical exams, type of warfare, and treatment options provided in war; specifically the Civil War, World War I and World War II, Viet Nam, and the Iraq War. By taking into account the history of PTSD as a disease, as well as these five triggers, we can fully explore why PTSD has increased in soldiers from war to war and how changing the negative stigma surrounding PTSD is the best way to help our soldiers.

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Sincerely,

Maisy

CHAPTER ONE

INTRODUCTION

In a time of war, most of society is affected by the conflict and the toll it takes on our country. For many, there is the constant stressor of feeling unsafe, the economic burden, and often the pain of losing a loved one in battle. Like the civilians at home, soldiers are also impacted by the experience of war. Not only do these men and women come home with a greater sense of purposefulness, and camaraderie, but they also have an increased, and well-deserved sense of pride for nobly serving their country.

Although there is a much-deserved feeling of patriotism and fulfillment for protecting their country, war also comes with a large amount of darkness that can be quite burdensome for soldiers. The demands that come with war, physically and mentally, can be traumatizing, devastating, and damaging in many ways. The impact of these emotional injuries manifest themselves in what physicians and psychologists call Post Traumatic Stress Disorder, commonly known as PTSD.

Yet, Post Traumatic Stress Disorder has not always been a priority for military and medical personnel. Only recently has it become a serious subject among psychologists due to the rising rate of soldiers suffering from the debilitating disease. Thus, the purpose of this paper is to examine why the rate of PostTraumatic Stress Disorder in soldiers has increased from war to war; specifically from World War I to World War II, Vietnam, and to the Iraq War. By exploring men's natural aversion to

killing, pre/post deployment medical exams, how training tactics have changed throughout the years, how the type of warfare has changed with each war, the treatment options provided, and the aftermath of war, the reason for why PTSD has increased in soldiers so much from war to war will be explained.

LITERATURE REVIEW

The mental collapse of a soldier after battle is not a new phenomenon, but has plagued the men and women of the armed forces for centuries. Dating back to as far as Homer's *lliad***,** symptoms of PTSD after war have been described; " I will not swallow food or drink- my dear friend being dead, lying before my eyes…Slaughter and blood are what I crave, and groans of anguished men" (Shay. 1994: 93). Yet, this internal struggle has not always been called Post Traumatic Stress Disorder as it is today. In fact, the definition and vernacular for this specific psychological disorder has changed more than nine times since the 1800s.

During the Civil War, soldiers and doctors alike described the symptoms of depression, anxiety, and emotionally overwhelmed, only by colloquial phrases. The terminology used included expressions such as "downhearted", "the blues", "played out", "dispirited", "used up", "badly blown", and in particularly serious cases "hysteria" (Dean1997: 116). These terms seemed to describe men who were torn down by combat induced mental and physical exhaustion, what we today call Post Traumatic Stress Disorder. As the history of psychiatry has shown us, the analysis of such forms of mental distress had not fully come about by the mid-nineteenth century.

However, the first clinical term emerged in the late 1800s. In 1886, German psychiatrist Emil Kraepelin began a study of the classification of mental disorders. In an attempt to classify the many quickly emerging psychological syndromes, Kraepelin used the label "fright neurosis" to depict the anxiety, fear, and depression that follows significant accidents and injuries (Freidman *et al*. 2007). This was the first case of the advancement of modern and sophisticated psychiatric terminology.

Yet, by modern day standards of psychiatric definitions, Kraepelin's classification was not specific enough to describe what we now call PTSD. It wasn't until 1952, immediately following World War II, when The American Psychiatric Association published their first ever *Diagnostic and Statistical Manual of Mental Health and Disorders*, that a clinical definition was developed. Kraepelin's "fright neurosis" was now replaced by the term "gross stress reaction" (Freidman *et al.* 2007: 3). Although this was a large step forward for the clinical identification of these psychological battle scars, its definition was nowhere near as precise as what we see today. This original *Diagnostic and Statistical Manual of Health and Disorders* (or *DSM*), did not list any detailed standards for diagnosticians to use; instead stated that "people who were previously relatively normal, but who had symptoms resulting from their experiences with extreme stressors such as civilian catastrophe or combat" were said to be suffering from "gross stress reaction" (Friedman *et al*. 2007: 3).

For the next sixteen years, this was the active name and criterion for those who found themselves mentally compromised after battle. However, in 1968 the *DSM-II* was published and eliminated the entire category of stress reactions. But in 1969, George Miller, the newly elected president of The American Psychiatric Association reinstated

the category after having served in Vietnam as a psychiatrist (Friedman *et al*. 2007). Without this, the diagnosis and analysis of Post Traumatic Stress Disorder would have become obsolete for an indefinite amount of time.

Stress induced psychological disorders underwent a large and important change during the 1970's. The women's movement focused its attention on the sexual and physical assault of women, and the toll these violent acts can take on a woman's psyche. In fact, the symptoms experienced by these female victims are almost identical to those experienced by veterans returning home from Vietnam (Friedman *et al.* 2007). Once these similarities were detected battered women and victims of child abuse created a subcategory of "gross stress reaction" called "rape trauma syndrome and battered women syndrome"; both of which share the definition of today's version of PTSD. While women and children were the focus of posttraumatic stress research, the psychiatric needs of soldiers were unattended. Combat veterans in the "early 1970s were almost universally diagnosed as paranoid schizophrenics, or if seen in the late 1970s as manic-depressive or schizo-affective…" (Shay 1994: 169). This type of miss-diagnosis is an easy mistake for medical personnel due to the overlap of symptoms, as stated in the 1970s definition of "gross stress reaction". Thus making it very easily to be confused with other mental disorders.

It wasn't until 1980, when the *DSM-III* was published, that the first official definition of the term "Post Traumatic Stress Disorder" emerged into the vocabulary of doctors, psychiatrists, and Army personnel (Friedman *et al*. 2007: 4). Not only was the disorder named, but a detailed explanation of specific indicators was given as well. PTSD was

now classified as an anxiety disorder with four main criterions. These measures are as follows:

> 1) The existence of a recognizable stressor that would evoke distress in nearly anyone.
> 2) At least one of three types of re-experiencing symptoms (recurrent and intrusive recollections, recurrent dreams, or suddenly acting as if the traumatic event were recurring).
> 3) At least one indicator of numbing of responsiveness or reduced involvement in the world (diminished interest in activities, feeling of detachment and disinterest, or constricted affect).
> 4) At least two of an array of other symptoms, including hyperarousal or startle, sleep disturbance, survivor guilt, memory impairment or trouble concentrating, avoidance of activities reminiscent of the trauma, or intensification of symptoms when exposed to reminiscent events.
>
> -(Friedman et all. 2007: 4)

This presentation of the first diagnostic criteria for PTSD spurred an overflow of psychological research in order to further determine the cause and affect of the disorder. By the mid1980s these detailed studies were dominating the academic psychological arena.

This abundance of new research prompted The American Psychiatric Association to re-evaluate the *DSM-III*, and in 1987 publish a revised version, titled *DSM-III-R.* This produced the criteria, which for the most part, is the definition still used today. Although much of the original *DSM-III* classification remained the same (i.e., the following criterion: apparent stressors, re-experiencing symptoms, avoidance symptoms, and arousal symptoms), one condition was added. The fifth official measure was the "Duration Criterion", which stated that symptoms had to have been apparent for at least a month (National Research Council. 2006: 15). This helped doctors to distinguish Post Traumatic Stress Disorder from other psychological disorders with similar symptoms. Not only did the *DSM-III-R* expand the psychological definition of PTSD, it also clarified

the definition of ‘stressors’. This refinement stated that stressors had to be “events outside the range of usual human experience (i.e., outside the range of such common experiences as simple as bereavement, chronic illness, business losses, and marital conflict)” (Friedman *et al*. 2007: 5).

With each new definition came new research, resulting in the *DSM-IV*, which was published in 1994 and then slightly revised in 2000. Despite these revisions, there were no large additions to the characterization of PTSD, only the formalization of specific diagnostic standards. “Criterion A [exposure to stressors] now had two parts: (1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat the physical integrity of self or others; and (2) the person’s response involved intense fear, helplessness, or horror” Friedman *et al*. 2007: 5).

Along side the excitement that came with birth and study of what we now call Posttraumatic Stress disorder, also came controversy. Critics of the classification and diagnosis claim that having an emotional reaction to specific events has occurred since the beginning of the human experience, and that this new classification is causing psychologists to over diagnose patients (National Research Council 2006). The second largest criticism is the legitimacy of the disorder itself. Many of those within the academic community believe PTSD has been socially constructed as a response to things such as war, the feminist movements, and Vietnam Veterans advocacy groups, rather than having been uncovered by clinical psychological researchers (Friedman *et al.* 2007). This line of thought is defend by the birth of other, closely related disorders, such as depression and schizophrenia, which came to light through psychological studies rather

than being the result of social action. Thus, people of this school of thought argue that PTSD cannot be a "real" medical condition. Due to the fact that the majority of objections regarding PTSD are based on the origins of the disease, it is quite likely that criticisms will continue to plague the study of PTSD.

As Friedman and his colleagues explain, what makes these criticisms different from those of other psychological diseases is that these concerns have been exacerbated by popular culture (2007). Following the September 11, 2001 terrorist attacks and the Iraqi and Afghani wars, the mass media has consistently taken the issue of PTSD into the hands of newspapers, magazines, and television. While although the civilian community has a right to be informed about the possible psychological affects of war, the majority of these public debates are no longer based in scientific fact, but in opinion.

However, the major debate regarding Posttraumatic Stress Disorder is whether the disorder is organic or environmental. Meaning: is PTSD caused by pre-existing vulnerabilities within individuals or is it caused by specific traumatic events. In short, this is the etiological argument of PTSD. "Much of the early research on Posttraumatic Stress Disorder was based on the assumption that PTSD is a natural consequence of trauma exposure. However, a growing body of research indicates that many individuals exposed to traumatic events do not develop PTSD. This has fostered the recognition that some people may be more vulnerable to the effects of trauma" (Vogt *et al.* 2007: 99). The following pages will describe the components of each perspective.

There are two main biological perspectives. The first of these is based on the brain. Specifically, that PTSD is characterized by persistently abnormal activity within the amygdala, medial prefrontal cortex, and hippocampus areas of the brain (Shin *et al.*

2005). The amygdala is involved with threat-related stimuli causing it to have a central role in fear conditioning: when organisms learn to predict harmful events (Rosenzwieig, Breedlove, and Leiman 2002: 483). As seen through mMRI's (morphometric magnetic resonance imaging) individuals suffering from PTSD has shown either amplified or diminished abilities of fear conditioning. This accounts for the constant feeling of fear or hyperarrousal, as well as numbness towards the world in those suffering from PTSD. This scientific evidence suggests, "the amygdala may be hyperresponsive in individuals with this disorder" (Shin *et al*. 2005: 60).

The second area within the brain that may cause some individuals to be pre-disposed to PTSD is the medial prefrontal cortex. This region of the brain is directly responsible for sending signals of fear to the amygdala (Shin *et al*. 2005). The medial prefrontal cortex is involved in the "extinction of fear conditioning," meaning its main purpose is to tell the body to not be afraid (Shin *et al.* 2005: 60). As Shin and her colleagues explain, multiple studies have shown that patients with PTSD experience little to no decline of fear after experiencing a traumatic event (2005). Again, brain-imaging data has shown hyporesponsive activity in the medial prefrontal cortex in those suffering from PTSD.

The third and final region thought to be a biological cause of PTSD is the hippocampus. The hippocampus is the area in the brain that is involved with the memory process (Rosenzwieig, Breedlove, and Leiman 2002). Multiple studies on animals have indicated that "high levels of stress-related hormones can be associate with memory impairment," as seen in patients diagnosed with PTSD (Shin *et al*. 2005: 60). The recent findings reviewed by Shin and her fellow researchers (2005) found reduced hippocampus hormones and abnormal activity in the hippocampus as a whole in those with PTSD.

Hippocampus volume, also assessed using mMRI's, is another measurable point to assess if the hippocampus is properly working. As explained by Horner and Hamner (2002), diminished hippocampus volume can contribute to the memory impairment experienced by veterans with PTSD, such as the memory fragmentation. The hippocampus can also be used as an example of a pre-disposition of PTSD because it is also involved with other psychological disorders, namely schizophrenia. Thus, if the hippocampus is at all weakened, not only does it make combat soldiers more susceptible to PTSD, but it may be the cause of several other psychological conditions in general.

However, the reduced hippocampus not only acts as a pre-disposition, but can also be the result of developing PTSD, and thus supporting the notion that the disorder is environmental. A study by Gurvits et al. (1996) examined this by comparing the sizes of hippocampuses found in combat veterans with PTSD, against combat veterans without PTSD. It was shown that the hippocampuses of veterans suffering from PTSD had a 26% volume reduction compared to the control group (Gurvits *et al*. 1996: Discussion). Thus, "the hippocampus volume was correlated with combat exposure and with severity of PTSD symptoms" (Homer and Hamner 2002: 24). This implicates PTSD as the reason for a reduced hippocampus volume and activity, rather than PTSD sufferers being born with a naturally compromised hippocampus. All in all, due to the conflicting studies on the hippocampus, it is unclear whether this is the definitive cause or effect of PTSD.

Another hypothesis that defends the notion that PTSD is produced through environmental stressors is based on a stress hormone named cortisol. Cortisol is released during the time of trauma in order to help us survive life threatening situations; acting as a natural alarm to help the body mobilize other resources. Cortisol is produced in the

hypothalamic-pituitary-adrenal axis (HPA): an important part of the neuroendocrine System that controls reactions to stress (Elzinga *et al*. 2003). During and after a traumatic event, cortisol is secreted by the adrenal gland found within the HPA axis. It has been shown that long-term strain on the HPA system and increased cortisol secretion can lead to PTSD. In a study conducted by Baker *et al*. (2005), cortisol levels were tested and compared in subjects with or without PTSD. The participants consisted of sixteen male combat veterans, eight with PTSD and eight without PTSD. Baker and his colleagues then tested the men's cortisol levels only in a state of rest. It was found that the mean "cortisol concentrations were significantly higher in the subjects with PTSD" (Baker *et al.* 2005: 992). Specifically, subjects with PTSD had cortisol levels of 3.18 ng/ml compared to soldiers without PTSD who had 2.33 ng/ml (Baker *et al*. 2005: 992). This means that soldiers with PTSD are in a constant state of stress and alarm compared to healthy soldiers. Thus, the environmental causes of PTSD, such as stress, can permanently damage a soldier's natural biological functions, and may explain why patients with PTSD often experience symptoms years after the original traumatic event.

The logical next question is, once you have these two conflicting perspectives, how do you then sort out causal order? In lamens terms: how do you know what really comes first? Damaged brain structure then combat, then PTSD? Or is it combat then PTSD, then a damaged brain structure? In truth, neither standpoint is technically wrong in their reasoning and both provide strong evidence. To this day, this question goes unanswered by professional scientists and psychologists.

By taking into account the history of the PTSD, its recognition, its criticisms, the influence of popular culture on the diagnosis, and the biological versus environmental

debate, we can then begin to fully analyze PTSD as a larger entity then just diagnostic criteria. Specifically, we will look at the question; why the rate of Posttraumatic Stress Disorder has increased in soldiers from war to war? The following pages will do its best to explore this research question by examining human's aversion to killing, pre and post-deployment medical exams, the changes in combat training throughout the years, how the type of warfare has changed with each war, and the treatment options provided. In general, each section is organized by conflict, beginning with the American Civil War and continuing through World War I and World War II, Viet Nam and Iraq. In the end I conclude that they way to decrease the number of soldiers suffering from Posttraumatic Stress Disorder is to address the negative stigma surrounding the disease.

CHAPTER TWO

The Psychological Effect of Combat Training

"Obedience to lawful authority is
the foundation of manly character"
- Robert E. Lee

Training has always been an important component of being a part of the Armed Forces. Not only are battle tactics explained in detail and executed in simulated field exercises, but training also helps "service members effectively deal with the survival in harsh environments, evasion from an enemy, and capture by a hostile force" (Doran *et al.* 2006: 242). Alongside the benefits of military training, there are also drawbacks with psychological consequences.

Although each war utilized different training exercises to adequately prepare soldiers for battle, each program followed the same basic pattern. Primarily, "individuals had to be broken down to be rebuilt into efficient fighting men" (Bourke 1999: 67). Training officials did this through the means of "depersonalization, uniforms, lack of privacy, forced social relationships, tight schedules, lack of sleep, disorientation followed by rites of reorganization according to military codes, arbitrary rules, and strict punishment" (Bourke 1999: 67). The purpose of such drastic measures was to ensure that

the behaviors and habits learned in training were so deeply ingrained in the soldier that they become innate response when faced with the violence fear that accompanies war.

Besides using stress and 'depersonalization' as tools to train the soldier, "hate training" was also used. "Many historians, psychologists, and military commentators shared the assumption that hatred was crucial in inciting the desire to kill and enabling individuals to act upon this urge" (Bourke 1999: 139). Although this is a valid point, it is the method of teaching hate that can be psychologically damaging for the soldier. There were different forms of hate training, which also varied in viciousness. One example of a mild form is propaganda. Training officials use negative propaganda to emphasize the flaws of the enemy and encourage soldiers to hate their opponent (Bourke 1999: 144). This proved effective because after repeated and constant stimulation to hate the enemy, it becomes a learned way of thinking. In the most extreme cases, soldiers would have to complete some form of intense physical task, such as an obstacle course, while dodging fake explosions, live ammunition, and even showers of sheep's blood (Bourke 1999: 141). In these cases, soldiers were taught to not always direct hatred of a specific target, but at the environment of war in general. This type of violence was thought to be effective and after World War II became "an essential part of the policy for those who direct the fighting machine to brutalize those who are to do the actual fighting. It will not do for your soldiers to regard themselves as the chivalrous champions of law and order; they must be properly inoculated with the blood-lust, they must desire to kill for killing's sake" (Bourke 1999: 141). All in all, hate training's main purpose was to incite hatred within soldier in order to produce effective combat behavior.

One of the more specific areas of training pertains to how to survive when lost in a foreign land. Students are taken out into the field to learn survival tools to be able survive unknown natural environments. These training techniques include "land-navigation skills through unknown territory and how to locate potable water, hunt and trap small animals, build small shelters, and differentiate edible from poisonous plants" (Doran *et al.* 2006: 245). Although these are extremely important skills to develop as a soldier, the cerebral learning of these are not all that go along with the training. "During this time, students are forced to deal with hunger, uncertainty, fatigue, and discouragement" (Doran *et al.* 2006: 245). Despite the benefits of experiential and hands-on learning, this can have psychologically damaging effects as well. By experiencing these drastic and frightening scenarios before: 1) having completed training, and 2) not knowing how to cope with the fear and anxiety of combat, it is highly likely that such training will weaken the mental stability of our soldiers, and quite possibly lead to symptoms of Posttraumatic Stress Disorder.

An additional training component is how to survive while in captivity as a prisoner of war (POW). In these training exercises, instructors role-play as captors and interrogators in order to simulate the reality of such situations as accurately as possible. Philip Zimbardo, Craig Haney, W. Curtis Banks and David Jaffe at Stanford University studied this type of master and slave-esq. role-play, in what has come to be known as the 'Stanford Prison Experiment' of 1973. This experiment consisted of 24 randomly selected young men who were evenly divided into two groups: prisoners and guards (Carnahan and Mcfarland 2007). The aim of this two-week trial was to observe the power that role-playing can have on an individual's behavior. However, it was discontinued

after six days because of the worrisome behavior found in this role-playing environment, and was deemed unethical to continue. Zimbardo and his colleagues found that after just six days of acting like prisoners, the men became "compliant, docile, and conforming," as well as developing "extreme emotional depression, crying, rage, and acute anxiety" (Doran *et al.* 2006: 246). This study has merit in the role-playing of captivity situations with soldiers. Like the Zimbardo study, captivity survival training exercises conducted by the U.S. Armed Forces aim to bring soldiers to emotional breaking points by using the exact behaviors they would experience when in a real POW situation, while demanding emotional and physical strength (Doran *et al*. 2006). Thus, if this is psychologically damaging during actual captivity, why would it not be damaging during mock simulation training?

Training is extremely important in order for soldiers to be successful. These drills not only teach troops how to perform tactical maneuvers, but they also instruct them on how to cope with and even stave off stress, fear, and other psychological reactions that come with battle. Unfortunately, in some cases, in order to teach such things, many training exercises purposefully bring soldiers to this diluted and weak mental state. Psychologists argue that after training that is too physically taxing or emotionally straining, soldiers will began to show serious symptoms of depression, and "would be more liable to stimulate unconscious guilt and depression than heighten moral (Bourke 199: 142). Therefore it is clear that attempts to use aggressive forms of training are "psychologically damaging" (Bourke 1999: 142).

CHAPTER THREE

MEN'S NATURAL AVERSION TO KILLING

> "In battle we see the id, the ego, and the superego, Thanatos, and Eros in turmoil within each soldier. The id wields the Thanatos like a club and screams at the ego to kill. The superego appears to have been neutralized, for authority and society say that now it is good to do what has always been bad. Yet something stops the soldier from killing. What? Could it be that Eros, the life force, is much stronger than ever before understood?"
>
> - Grossman. 2009: 38

There is a psychological response to taking a life; which is more powerful than any form of military training, and more powerful than self-defense. This primal instinct to preserve the life of fellow human beings can often take a toll to those fighting in battle. This primarily comes at the price of a soldier's mental health, for taking a life, preserving a life, or from simply being in battle. This is not limited to the age of rifles and hand-to-hand combat such as the Civil War, but can be traced alongside the technological advances of World War I, to World War II, Vietnam, and even to the present day Iraq War.

CIVIL WAR

The Civil War lasted from 1861-1865 and was primarily a rifle, musket and gunpowder war. Due to the time it takes to properly load a musket, and the difficulty, a majority of battle consisted of time spent loading weapons. Taking into account how often and for how long men would stop in the middle of battle to reload their weapon, the majority of men should have been killed while holding empty weapons. Yet, according to historical data, this is untrue, in fact it is just the opposite. For example, after the Battle of Gettysburg, 27,574 muskets were collected off the battlefield. Of these, 24,000 or 87% were fully loaded (Grossman 2009: 23). Yes, there were many soldiers who were shot with a loaded rifle in hand just as they prepared to fire, but the probability of this happening to 87% of those who died is highly unlikely. However, it doesn't stop there; 12,000 (50%) of those loaded muskets were found to be loaded more than once, and 6,000 of those were found to be loaded more than three times (Grossman 2009: 23). As Grossman argues, these men were not trying to kill the enemy (2009). Men would load and reload their weapons instead of firing; they could not make themselves kill another man. The fact that these soldiers ignored and overcame their training to kill the enemy clearly demonstrates the power of man's natural aversion to kill.

Soldiers who actively tried not to kill the enemy were not received well by high ranked military officials. In fact, during the Civil War it was considered a form of desertion to not attack the enemy when ordered to do so, thus many soldier's were court-martialed for being "cowards" (McPherson 1997). The outcome of such court-martials had a wide range of punishments. Most were sentenced to some sort of manual labor. While others were punished with public whippings, being forced to wear a sign on their back that read 'Coward', and even execution (McPherson 1997: 51). This was the army's

subtle way of forcing men to fight by threatening them with the public humiliation of being labeled to afraid to fight.

In an attempt to fix their 'desertion' problem, Officers came up with two different solutions. The first of these was to threaten their soldiers. "Officers would scream and cajole and beat on these men, even striking them with bayonets, or in extreme instances, resort to shooting them" at the slightest hint of not wanting to do harm to the enemy (Dean 1997: 54). Thus, soldiers were surrounded by fear at all times; the fear of being killed by the enemy, and the fear of being beat or killed by your own commanding officer. One Union Lieutenant wrote his family of such behavior after the battle of Bull Run in 1861: " ' when we first went into action, our men…seemed inclined to back out, but we stationed ourselves behind them and threatened to shoot the first man that turned' " (McPherson 1997: 49). The use of violent threats forced soldier's to kill their fellow man, sometimes against their will, for fear of being executed by their own comrades. By neglecting the primal instinct to preserve human life, soldiers took one step closer to PTSD.

The second solution to men not wanting to kill came about in 1863. Both the Union and Confederate armies created special units of men whose sole purpose were to make sure no one deserted or went in to hiding during battle (McPherson. 1997: 50). These men did not fight the opposing army during battles, but stationed themselves behind the troops. That way "they will be under a hot fire from both the front and the rear" (McPherson 1997: 51). This presented another form of fear and pressure for soldiers to kill their fellow man or be killed. Thus, men were fighting on two fronts; against the enemy, and against their own fear.

World War I

During World War I, the most common physical demonstration of a man's subconscious resistance to kill another man came in the form of conversion hysteria. Conversion Hysteria is often the result of trauma, which can come in the form of a minor wound, concussion, or experiencing the violence of battle in general (Grossman. 2009: 47). The effect of such trauma is then portrayed physically, for example, "as an inability to know where one is or to function at all, often accompanied by aimless wandering around the battlefield with complete disregard for evident dangers" (Grossman 2009: 46). Extreme cases resulted in the paralysis of the arm, quite commonly "the arm used to pull the trigger was the one that became paralyzed" (Grossman 2009: 46). Soldiers would physically lose control after experiencing the pressure to kill. The natural resistance to killing one's own species during combat was so great that the mind's only way to express this was to manifested itself physically

Men's natural aversion to kill was also seen in the "increased killing of an enemy whose back was turned" (Grossman 2009: 126). Not seeing the face of the enemy increase the emotional and physical distance between killer and victim. If a soldier does not have to look into the eyes of the victim while killing them, it is much easier to deny the humanity of the victim, and to avoid the guilt that comes with killing a fellow man. If there were no natural and subconscious aversion to killing another human being, then soldiers would not feel the need to shoot their enemy in the back.

World War II

The psychology of soldiers has been studied with each American War. After years of research in different settings, with hundreds of people, and by many different researchers, the conclusion has always been the same: men's natural aversion to killing is a strong, and deeply embedded standard within our psyche. Studies of World War II prove no different. Medical Corps psychiatrists during World War II conducted a study of 'combat fatigue' cases found on the European front. They found that the "fear of killing, rather than fear of being killed, was the most common cause of battle failure in the individual" (Marshall 2000: 78). The fact that this conclusion was found in hundreds of cases shows that mans aversion to killing is not one individual's belief, but an innate and universal principle.

At the end of World War II, famed combat historian S. L. A. Marshall conducted a study on the percentage of American soldiers who fired their weapons during battle. Marshall's study was comprised of interviews of four hundred different infantry companies in active duty, and asked the question: "During engagement, what ratio of fire can be expected from a normal body of well-trained infantry under average conditions of combat?" (Marshall 2000: 51). Marshall, as well as the majority of other war historians were shocked at the results: no more than 15% of soldiers had physically fired a weapon at the enemy (Marshall 2000: 54). This clearly highlights the strength of humans subconscious reluctance to kill another human being.

Although only 15% of men in combat during World War II would fire directly at the enemy, that does not mean 85% did not help defend their country. Instead, those who did not fire put themselves into other tasks. In fact, "in many cases they were willing to

risk greater danger to rescue comrades, get ammunition, or run messages" (Grossman 2009: 4). Thus, we can argue that it was not the fear of death or battle that caused men to not fire their weapons, but innate human nature to the aversion of killing a fellow man. It is the dichotomy of "balancing the obligation to kill with the resulting toll of guilt forms a significant cause of psychiatric casualties on the battlefield" (Grossman 2009: 90).

Viet Nam

The Viet Nam war was unique in that unlike previous wars, there were excessive acts of violence towards locals stemming from American troops. One example of this was the famous My Lai Massacre of 1968. This was a routine search of a village, which resulted in the deaths of over 80 noncombatant women, children, and elderly people by U.S. soldiers (Kelman and Hamilton 1989: 4). This violence goes against man's natural aversion to killing another human. Then what force was powerful enough to outweighed this innate instinct and the ethical issues such violence provides? The answer is the hate training these troops went through before deployment.

The main function of hate training is to dehumanize the enemy, and in the case of Viet Nam, this hate training was so powerful it caused soldiers to outside the realm of their duty and kill all who represented the enemy. In the case of My Lai, that meant innocent villagers. "Descriptions of My Lai, based on eye witness reports, suggest that the killings were accompanied by generalized rage and by expressions of anger and revenge toward the victims" (Kelman and Hamilton 1989: 15). In order to be able to reject the natural urge to spare the life of a fellow human, especially an innocent civilian, training officials needed to have concentrated on making troops see the Vietnamese as

less than human by creating rage and anger towards the enemy. Such hostility is created "largely by dehumanizing the victims" (Kelman and Hamilton 1989: 15).
This is because soldiers would be not as adverse to killing people they don't consider human or equals. Thus, in extreme cases, training can have the power to overshadow man's natural aversion to killing.

However, just because soldiers were able to override the natural instinct to preserve life, does not mean acts of unnecessary violence did not affect them. Soldiers who took part in the My Lai Massacre recalled crying and sobbing as they fired their weapons into the group of villagers, and testified to experiencing emotional and psychological distress after the war (Kelman and Hamilton 1989: 5). For many of these soldier's they justified killing My Lai villagers with blaming warfare; "but warfare is subject to many legal limits and restrictions, including, of course, the inadmissibility of killing unarmed noncombatants" (Kelman and Hamilton 1989: 5).

Iraq

Unlike previous conflicts, the Iraq War primarily consisted long distance fighting. Although this sounds as though it would take the burden of killing off the shoulders of the troops, it did not. Instead of subconsciously finding ways to avoid the act of killing, soldiers of the Iraq War had no way to not pull the trigger, and thus struggled with "balancing the obligation to kill with the resulting toll of guilt," which in turn "forms a significant cause of psychiatric casualties on the battlefield" (Grossman 2009:90). As in previous wars, this type of subconscious distaste for killing another man manifested itself in multiple forms.

In recent years, the nature of war has changed from close-range battle, to technology-based distance fighting. The physical distance experience during the Iraq War creates psychological distance within a soldier. This is commonly known as desensitization. Missiles are sent from hundreds of miles away, and are watched on a screen as they approach their target (Nadelson 2005: 45). Technology eliminates the personal involvement a soldier would have during battle. That is why "the pilots, navigators, bombardiers, and gunners [are] able to bring themselves to kill…primarily through application of the mental leverage provided to them by the distance factor" (Grossman 2009: 102). Although this allows for a soldier to pull the trigger more easily, there is the emotional consequence of desensitization, which emotionally protects the individual. As a whole, desensitization is the result of guilt; the guilt of morally disagreeing with what you are doing, and guilt for the consequences of your actions.

This desensitization and guilt is directly reflected in the language used by troops. As Grossman pointed out, "the language of men at war is full of denial of the enormity of what they have done" (2009: 91). By disowning his actions to others verbally, allows the soldier to deny his actions to himself as well. This is done by eliminating the humanity of the enemy through words. Instead of recognizing the enemy as a human being, they are given derogatory names, such as: Jap, Kraut, Dink, or Rag Head (Grossman 2009:91). By creating this type of negative slang men deflect the burden of having killed by acting and speaking as though they have not killed. This form of denial and dehumanization serves as an attempt to rationalize going against man's natural instinct to preserve life.

Another example of how the language used by soldiers during the Iraq War dehumanizes the enemy is seen in the act of killing. When an enemy soldier is killed in

battle, he was not ‘killed’, but was “knocked over,” “greased,” “wasted,” “mopped up,” or “taken out” (Grossman 2009: 91). By dehumanizing the act of killing through specific vernacular, it helps the soldier deny that he has taken another life. Dehumanizing the enemy also validates what the subconscious deems wrong and immoral. Thus, the language of the troops one-way in which man’s natural aversion to killing was personified in the Iraq War.

CHAPTER FOUR

PRE-DEPLOYMENT MEDICAL EXAMS

> " There is no witness so dreadful, no accuser so terrible as the conscience that dwells in the heart of every man"
>
> -Polybius (205 BC- 118BC)

Civil War

The Civil War pre-deployment procedure consisted of a single registration process. This consisted of retrieving data from those young men choosing to enlist. The age, race, occupation, and place of birth of soldiers where the primary subjects used to create military censuses for both the Confederate and Union Armies (Logue 2002: 46-56). However, this pre-deployment registration did not include a medical exam. Unless there was an obvious physical limitation, all soldiers were cleared for duty.

This lack of psychological testing made soldiers with current mental illness or with predispositions fight in combat, and possibly cause more emotional damage. Men would enter battle and immediately fire their weapons. This would instantly create a "radical transformation as fear and anxiety," combined with "rage, anger, and a sense of disembodiment," would take over the conscious and psyche of these young men (Dean

2002: 403). By the end of the Civil War, thousands of men became psychological casualties. This spurred a movement within military officials to have a more concrete pre-deployment medical exam.

World War I

The pre-deployment medical exams given to soldiers during World War I were not only sparse in terms of their physical requirements, but there was barely a psychological test at all. In fact, the induction procedure at this time consisted of a screening process. The first step was for medical examiners from community draft committees to assess individuals, only for overt deficiencies (United States Army Medical Department 1966: 21). If such a defect was found, then the case would be passed to the military medical advisory board for further examination (United States Army Medical Department 1966: 21. Of all the soldiers who underwent such medical screening before their deployment, only 2 percent were rejected for psychiatric reasons during the induction process (United States Army Medical Department 1966: 7).

This system proved to be ineffective because "psychiatrists of World War I…identified and eliminated individuals who manifested obvious symptoms of mental disease and defect" (United States Army Medical Department 1966: 7). Therefore all symptoms of mental illness that are not blatantly clear, but instead are covert and slightly hidden within the personality of the patient, are completely avoided and medically cleared for combat. This caused numerous young men with mental instability and predispositions to enter into battle.

This ineffectiveness is further illustrated in post-war statistics. After the War, the United States Army Medical Department conducted research on the number of soldiers who returned home from war with emotional and psychological damage. They found that "for every four men wounded there would be one psychiatric battle casualty" (United States Army Medical Department 1966: 17). This totals over 30,000 psychological casualties (Nadelson 2005: 89). This high victim rate indicates the importance of pre-deployment medical exams and screenings. However, the lack of knowledge in regards to psychiatric testing also mirrors the lack of general knowledge of Posttraumatic Stress Disorder in the early 1900's.

World War II

World War I demonstrated the essential need for psychological screening prior to deployment in order to eliminate psychiatric disorders before granting men entry into the United States Armed Services. However, it wasn't until the beginning of World War II when a professional psychiatrist was given a position in the Surgeon General's Office that the issue of mental health could be addressed (United States Army Medical Department 1966: 386). The first steps towards a solution were requiring medical exams at registration and mid-tour psychiatric screenings.

The first plan for pre-deployment psychological exams of draftees and independent sign-ups was presented on November 7, 1940 in the "Selective Service System's Medical Circular", No. 1 (United States Army Medical Department 1966: 160).

This manual advised examiners to look for neuropsychiatric symptoms that fell into five categories:

> Type I: Mental defect or deficiency
> Type II: Psychopathic personality
> Type III: Major abnormalities of mood
> Type IV: Psychoneurotic disorders (the hysterical; the morbidly anxious; the obsessional)
> Type V: Prepsychotic and postpsychotic personalities"
>
> -United States Army Medical Department 1966: 159

This system of analysis initially proved effective, and numerous men were not allowed to join the U.S. Army because they presented with one or more of the neuropsychiatric symptoms. In fact, "…about 12 percent of the registrants examined in World War II were classified as IV-F for neuropsychiatric reasons, representing 38.2 percent of all disqualifications" (United States Army Medical Department 1966: 388).

Although it seems as though this process would solve the Military's issue with mental illness, there were also some considerable errors. One such error was that all potential soldiers were examined by their local general physicians who had almost no mental health training. Thus, it was common for examiners to miss key symptoms of mental instability due to "ignorance or lack of insight" (United States Army Medical Department 1966: 243). This caused major inaccuracies in regards to who was condemned 'mentally fit' for battle. If found to be healthy, men were then sent to an Army Induction Station for a final psychological evaluation by a trained psychiatrist. While this sounds like an efficient back up plan, that was often not the case. These psychiatrists were "under pressure to accept defective men against his better judgment" by their superiors (United States Army Medical Department 1966: 243). Yet again, men

suffering from mental illness or with possible predispositions were medically cleared for combat.

What also made it hard for medical examiners to adequately accept or reject men was that the criteria for medical discharge presented by the War Department continually changed. “At one time, it was directed that all men with psychoneurotic disorders be discharged medically while, at another time, it was directed that if a man were capable of performing any duty he was to be retained in the service regardless of diagnosis” (United States Army Medical Department 1966: 196). Consequently, a majority of men deemed ‘fit’ were in fact suffering from a form of mental illness and would continue to do so during their tour of duty.

In order to catch soldiers struggling with psychological illness, whom had either slipped through the initial examination or procured it during deployment, psychiatrists were stationed in the European and Pacific theaters of the war. Consequently, psychiatric screenings were put in place. These inspections were set up “in training centers, medical installations, ports of embarkation, and elsewhere through the Army to detect and discharge those military personnel suffering with, or predisposed to, psychiatric disorders” (United States Army Medical Department 1966: 388). This method proved to be successful. In 1942, 22,000 men were discharged due to psychiatric reasons, and in 1943, there were 18,000 discharges in the month of September alone (United States Army Medical Department 1966: 388). However, with these discharges, it became clear that a large majority of soldiers who were hospitalized had actually had a predisposition for mental instability. For example, it was found that within most cases of “combat

neurosis", evidence of pre-combat depression were noticeable in a portion of patients (United States Army Medical Department 1966: 243).

Once it was realized that 'unfit' men had slipped through the cracks of the initial screening process, it became clear how much psychological disorders affected men's performance in battle. Of theses men, "3 to 10 percent of them who still remain[ed] on duty broke down and were admitted to the hospital" after a combined total of 10 days of "frontline combat" (United States Army Medical Department 1966: 405). For men considered healthy, the average emotional breaking point was after 80 to 90 days of cumulative frontline combat (United States Army Medical Department 1966: 405). The large difference between men who were considered 'healthy' and those who were deemed 'unhealthy' clearly proves that men entering the Armed Forces with predispositions for mental illness are far more likely to produce symptoms of Posttraumatic Stress Disorder. Thus, pre-deployment medical exams are extremely important and have a great affect on the mental health of soldiers during wartime.

Viet Nam

By the beginning of the Viet Nam War the military had learned from past wars, and had a complete pre-induction medical exam intact. This exam is called the Armed Forces Qualifications Test. It included both a physical examination and a psychological assessment. According to military entrance standards, any person scoring in or below the fourth category of the Armed Forces Qualifications Test were not allowed to be a soldier in the United States armed forces.

However, finding men who would pass all medical exams proved to be a challenge. In 1964, a study on the country's draft age population was published by the President's Task Force on Manpower Conservation. They found that 35 percent of the men studied would "likely be rejected for induction into the armed forces owing to their failure to meet the military's physical, mental, or moral standards" (Lepre 2011: 63). This was clearly reflected in the number of draftees, causing government officials to worry about the number of troops in Viet Nam.

Secretary of Defense Robert S. McNamara had a solution. McNamara believed that a majority of the men who had failed the Armed Forces Qualification Test could in fact perform well as soldiers if given the opportunity. Therefore, in 1966 he established 'Project 100,000, which altered the armed forces induction standards (Lepre 2011: 63). Project 100,000 made it so the armed forces had to annually admit 100,000 draftees who had previously failed the Armed Forces Qualification Test and been rejected for service (Lepre 2011: 63). Thus from the time Project 100,000 was instated in 1966 to its end in 1971, a total of 341,127 unstable and/or unqualified men were brought into the military (Lepre 2011: 63). Thus, men with predispositions for mental illness and PTSD were knowingly placed in high-pressure situations and violent combat zones.

These dispositions did in fact manifest themselves in the behavior of the soldiers. "Project 100,000 soldiers were convicted by court-martial at a rate of over twice that of other troops" (Lepre 2011: 64). Due to the fact that these soldiers were pushed into the military despite failing their mental health exam is directly reflected in their behavior, and their "lower stress tolerance and a relative lack of the usual mechanisms for coping with stress" (Lepre 2011: 64). In turn, Project 100,000 men were seen for psychiatric

evaluations as much as ten times more often then their colleagues (Lepre 2011: 64). By placing men with mental illness in combat government and army officials knowingly made men suffer the psychological pain of combat. Thus, medical exams are a useful tool in assessing and preventing Posttraumatic Stress Disorder in military personnel.

Iraq War

Since World War II and the Viet Nam War, pre-deployment psychiatric assessments have taken important steps forward in order to assure the emotional safety of our troops while fighting in the Iraq War**.** Despite these changes, psychiatric evaluations still aim to answer the same question: "Are particular service members able to safely and effectively perform their jobs from a mental health or neuropsychological standpoint?" (Budd and Harvey 2006: 35).

The Armed Forces Qualification Test first administered during the Viet Nam War, is still very much present in today's pre-deployment medical examinations. However, once a soldier passes this physical and psychological test, they move to a second round of mental health testing; the criteria for which can be found in the U.S. Department of Defense's *Mental Health Evaluations of Members of the Armed Forces* (Budd and Harvey 2006: 36). When performing this next stage of evaluations, military psychologists look at the service member's medical records to guide the examination. By looking at any "previous contact with mental health [professionals], substance abuse programs, hospitalization records, along with results of the physical exam," military psychiatric examiners are able to delve into psychological issues specific to each patient, rather than

solely relying on the general questions in the Armed Forces Qualification Test (Budd and Harvey 2006: 39).

Another new aspect of pre-deployment medical exams is that there are specific tests for each department within the Armed Forces**.** Each specialty within the Armed Forces now has it's own psychiatric criteria to help Military Officials place servicemen in certain jobs. This process, known as 'screening out', not only concentrates on the psychological state of soldiers, but is also an "overview of social, academic, and occupational functions, as well as any history of trauma, substance abuse, legal entanglements, or medical issues" (Budd and Harvey 2006: 46). The primary purpose of this is to identify subtle and specific mental health problems that can negatively affect a soldier's performance. One such example is the medical criteria for Submarine Duty; all individuals with a history of suicide or personality disorders are automatically disqualified for work on a submarine (Budd and Harvey 2006: 45). While those individuals suffering from "anxiety disorders, lack of motivation, history of personal ineffectiveness, difficulties with interpersonal relationships, [or] a lack of adaptability," are not immediately disqualified, but are not preferred (Budd and Harvey 2006: 45). By determining the qualities needed by each specialty, those with psychiatric issues are not placed in positions where they may encounter more emotional damage. Due to the fact that 5% of every 2,530 soldiers evaluated prior to deployment in Iraq meet the criteria for PTSD, this statistically, this weeds out all those with previous psychiatric injuries, and thus predisposed to PTSD (Budd and Harvey 2006: 221). This places even more importance on the pre-deployment psychological evaluation as an element of the selection process.

The last addition to psychiatric exams comes at the end of a soldier's tour of duty. As members leave the military they are eligible for benefits from the Veterans Association. However, "the VA requires that an [psychiatric] evaluation be completed by a designated psychologist" (Budd and Harvey 2006: 48). This comes in the form of a lengthy questionnaire that covers several categories, from eating disorders to Posttraumatic Stress Disorder (Budd and Harvey 2006: 48). By making this type of psychiatric assessment mandatory upon applying for veteran's benefits, the VA is actively attempting to find all psychiatric causalities, and give them the proper treatment.

CHAPTER FIVE

DIFFERENT TYPES OF WARFARE

"War is cruelty"

-William Tecumseh Sherman

CIVIL WAR

The Civil War was different from recent wars due to the type of warfare used during the 1800's. Not only was battle at close range, but it was often even face-to-face. The use of artillery during war was also relatively new, which put soldiers in a constant state of stress and apprehension. Yet, what is unique to this war compared to the others discussed in this paper is the serious threat of disease. All of these aspects of the Civil War that made it unique actively came together to generate cases of "shell shock" or what is now known as Posttraumatic Stress Disorder in soldiers.

Engaging in a battle where you are nose to nose with your enemy is an entirely different type of warfare than we are used to in today's society. This type of combat highlights men's natural dislike and unwillingness to kill. However, it also produces severe psychological trauma. "Looking another human being in the eye, making an independent decision to kill him, and watching as he dies due to your actions, combines

to form one of the most basic, important, primal and potentially traumatic occurrences of war" (Grossman 2009: 31). Pulling the trigger and watching a man die twenty feet away from you is far different than flying 100,000 ft in the air and dropping a bomb. This intimate form of battle is directly linked to why men were so dazed and shocked at being in battle that they reloaded their weapons multiple times without shooting, exhibiting symptoms we now can connect to Posttraumatic Stress Disorder.

The use of artillery was also a major contribution to soldier's fears and symptoms of PTSD. Men entered war expecting to fight with gunpowder-fueled muskets, or in worst-case scenarios, knives and bayonets. That is why when soldiers first experienced artillery fire they were completely overwhelmed. The advantage of using artillery is that you can fire weapons from hundreds of yards away and the enemy wont expect it, or see it. Thus, "civil war soldiers were indeed terrified at the prospect and actuality of such bombardment, and experienced considerable psychological fear and anxiety as a result" (Dean 1997: 63). Soldiers struggled with the question of how to protect themselves from this basically invisible weapon. Most could not find the answer, and lived in perpetual state of anxiety, defenselessness, and terror of not knowing when the next artillery attack would be. Hence, "the Civil War experience seems to confirm the theory that soldiers in a passive position of helplessness – such as those subjected to artillery bombardments—feel intense terror and anxiety, and may be at great risk for psychological breakdown" (Dean 1997: 66).

The third aspect of the Civil War that sets it apart from other wars in American history is the battle soldier's had to fight against the deadliness of disease. As historian Gerald F. Linderman explains in his book, *Embattled Courage: The Experience of*

Combat in the American Civil War, there were two distinct outbreaks of disease in the military camps of both the Union and Confederate armies (1987: 115-120). The first wave of disease consisted of illnesses such as mumps, smallpox, and measles (Linderman 1987: 115). These seemed to mostly affect men from smaller country villages, since the majority of city men had been exposed to these illnesses during childhood. Those who survived this surge of disease developed immunity, but were significantly weakened by the illness (Linderman 1987). The second wave was much more widespread and affected the majority of camps. This upsurge consisted of disease such as malaria and dysentery (Linderman 1986: 115). Once a camp was hit with one or all of these illnesses it was virtually impossible to eradicate and would continue to spread among the camp. By the end of the war 224,580 men in the Union army died of disease, while 223, 535 were discharged due to illness. That is double the 110,000 Northern men who died from battle wounds. Thus, scholars such as Paul Steiner, a professor of pathology, viewed disease during the civil war as the first form of "natural biological warfare" (Steiner 1968: 3).

As one Union soldier stated: "There is a hopeless desperation chilling one when engaged in a contest with disease" (Linderman 1987: 117). The serious diseases that were present during the Civil War swallowed its victims in depression. Those who suffer from the illness were given only minimal medical treatment, leaving the majority of them to wait for an inevitable death. Yet, even those who were lucky enough to be healthy were consumed by the fear of catching one of these diseases. This created a fear not only of dangers on the battlefront, but also in the camps. By constantly being in a state of fear, even in the 'safe' place that is a military camp, soldiers were presented with a form of suffering that often caused symptoms of PTSD.

World War I

The four years from 1914 to 1918 is known in history as World War I. For American troops, this meant fighting on foreign soil. Therefore, soldiers had to be shipped to the battlefront in Europe to fight the German, Austria-Hungarian, and Italian armies. "200,000 American [soldiers] were arriving [in Europe] each month," to fight alongside the United Kingdom, Russia, and France as a part of the Allie forces (Stone 2009: 126).

Combined, the countries fighting against the Allies (commonly known as the Central Powers), created a powerful army. Germany alone had an established army of approximately 800,000 men (De Groot 2001: 24). Together, these three countries created one cohesive force that used advanced weaponry as their main mode of power, which in turn was also a significant aspect of the fears of U.S. soldiers. Throughout the course of the war there were many forms of weapons used, but three were relatively new compared to the rest. The first of these weapons is the howitzer; an artillery piece that launched explosives into the air extending up to 10 miles away (Stone 2009: 38). Howitzer's proved effective due to being able to fire from such a long distance away from the target. This range often took Allie forces by surprise, acting as one of many sources of stress for American troops.

The second weapon used by the Central Powers was shrapnel. Shrapnel is a load of projectiles that exploded when launched into the air, causing the deadly contents to scatter over a wide area (Stone 2009: 102). This was extremely successful in that more than one target could be hit at a time. However, this also created an abundance of fear

among Ally troops. Not only was the random scatter of projectiles threatening because there was no way to know who would get hit, but it also nearly impossible to differentiate the sound of shrapnel fire from other weapons such as mortar shells and even howitzers. The third weapon used by German, Austrian-Hungarian, and Italian forces was gas. Using poisonous gas as a weapon had never been used before, and made its first appearance in World War I (Ston. 2009). One specific type of gas, irritating gas, proved especially deadly to Allie forces. When used it caused victims "to tear off their gas masks to scratch the itch, whereupon one or other of the poison gases took effect" (Stone 2009:164). Thus, soldiers who were caught in a gas attack suffocated to death, which is a frightening and heavy worry for soldiers to carry around with them.

The U.S. Army, as well as other Allied countries, also had a relatively new weapon called the tank. Tanks consisted of a metal body on top of revolving tracks, which were resistant to gun-fire (Stone 2009: 104). Although the tank was immune to personal weapons, and was visually threatening, it had considerable problems. "The internal combustion engine had not really developed far enough to take thirty tons of weight, and the tanks easily broke down; they also moved very slowly, and, through the armour was thick, they could be put our of action by a well-aimed shell" (Stone 2009:105). Due to the fact that warfare technology was still in its beginning stages at the time, it is not unusual for such machinery to break down. However, the mechanical uncertainty, alongside the stress of not feeling protected, which easily lead to feelings of uneasiness and stress, and possibly symptoms of PTSD.

Another prevalent trigger of anxiety for most U.S. soldiers was the surroundings. Rodents found their way into the military camps, infesting everything from the kitchen

and trenches, to the sleeping quarters (De Groot 2001: 165). Not only did this make the entire camp unsanitary, but these rats also spread disease; most commonly lice. Therefore troops were consistently uncomfortable with the itchy disease, but could never be comforted by the thought of a cure, because the lice carrying rats would only re-infect them.

Europe also introduced many men to certain natural forces they had never experienced before. One such example of this was rain. On the Russian front, there were a total of three rainless days for the entire month of August 1917 (Stone 2009: 140). Although this sounds like it would merely be an inconvenience for troops, it in fact caused extreme emotional damage when coupled with the activities of war. “Heavy shelling made the problem far worse, because the battlefield and the routes towards it turned into quagmires” (Stone 2009:140). This in turn made it so that even slightly wounded men who could not balance themselves, often fell and drowned in the saturated and marshy land. The extreme abundance of rain also caused severe flooding in many areas, thereby generating even more problems for U.S. soldiers. The most prevalent of these was trench flooding. Men, “who had crawled into shell-holes for safety found that the rain caused the water in them to rise and rise,” forcing them to choose between getting out of the trench and facing artillery, or stay in the trench and face the possibility of drowning (Stone 2009: 140). Not only could soldiers not find safety, but it also forced them to make the choice between different modes of possible death. This often placed soldiers in a place between the madness of war, and the reality of their position, and therefore “suffering from what might today be called post-traumatic stress” (De Groot 2001:200).

World War II

By 1939, twenty years after World War I, warfare had completely changed. World War II was a war of machinery. New weapons were used in battle, new diseases burdened the health of soldiers, and their tours of duty were extended to new lengths. Individually these are fixable problems that offer little emotional harm. Yet together, they had the power to damage the psyche of World War II soldiers, and ultimately created the mass desensitization of our soldiers.

New weapons were introduced to battle during World War II. Although they were powerful, they also came with problems. Many backfired, exploded, were not appropriate, or simply did not work; placing an unneeded amount of stress on soldiers assigned to use them. One of these was called the M4 Sherman. This was the primary battle tank of the U.S. Army (McManus 1998). The M4 Sherman was quick and easy to maneuver, making it an asset in battle. However, it was fueled by gasoline making it extremely flammable. Receiving more than two or three rounds of enemy fire would cause the gas to ignite from artillery sparks and burst into flames. Thus, the M4 Sherman "was considered a death trap" for the soldiers operating the tank from the inside (McManus 1998: 37).

The second weapon that was extremely useful, but outstandingly dangerous was the M1 Bazooka. The Bazooka's only purpose was to fire rockets that would penetrate the metal walls of enemy tanks (McManus 1998: 39). Despite doing it's job remarkably well, it posed a problem for the soldier firing it. Due to the fact that Bazookas are loaded one at a time with rockets, once it is fired it immediately gives away a soldier's position

before they have time to reload. This often left soldiers open to enemy fire with limited to no means of protection. “Firing a bazooka, then, was a dangerous job even though it could accomplish the task of destroying a tank” (McManus 1998: 39). This created a large amount of trepidation for soldiers when using their own weapon.

The flamethrower, like the bazooka, was also a point of fear for soldiers. A flamethrowers function was to project a controlled stream of fire at the enemy. Yet again, once used, it gave away a soldier’s location making them the main point of attack; “naturally any sane enemy who saw that he was about to be burned to cinders would try to kill the man carrying the flamethrower” (McManus 1998: 40). As you would expect, the more or less guarantee of being the subject of an enemy attack made it so no soldier wanted to work a flamethrower; making every soldier feel uneasy using weapons meant to protect them.

The final weapon that was first used in World War II was called the M3 or ‘grease gun’ (McManus 1998: 43). This was a type of submachine gun that was issued to every American combat soldier for short-range shooting. Although it held multiple rounds of ammunition and was remarkably accurate, it too had negative points. Soldier Radford Carroll described the major flaws of the M3:

> The M3 was…a very cheaply made device. It had its merits but also…some serious defects. The two major defects were that the springs were not correctly tempered. Unless the bolt strings were stretched every so often, the gun would not function. The magazine was designed to hold 30 bullets, but if 30 bullets were loaded the magazine springs would not have enough force to lift the bullets.
>
> -McManus 1998: 43-44

Again, the M3 put soldiers in a position of helplessness when facing enemy fire. The fear of your own weapon not being able to protect you is a concern soldiers should not have to encounter or endure.

A weapon malfunctioning, causing injury, or drawing enemy fire was a serious factor to consider in the everyday lives of troops during World War II. Not being able to feel safe, protected, or able to defend yourself with the tools you were given was a form of distress that eventually lead to symptoms of PTSD for many World War II soldiers.

U.S. troops not only had to deal with their own weapons, but also with the war tactics of their enemy, the Germans. Like the United States, Germany also used tanks and machine guns. But what the German Army used that the Allies did not were booby traps and mines. The Germans used booby traps as a form of defensive warfare, and were primarily made of hidden bundles of TNT put into place by small, mobile groups of soldiers. The power of the booby trap was in the element of surprise. Germans would either hide them in covert corners, or in plain sight. They were known for booby-trapping abandoned residential homes, and even the bodies of their own dead soldiers (McManus 1998: 64). This created a tense atmosphere for U.S. soldiers at all times because they could never predict where the next booby trap was. By living in a constant state of anxiety soldiers were continually at risk for psychological damage.

U.S. soldiers also had to be wary of German mines. These were small, hidden explosives triggered by touch. What made mines so alarming was how concealed they could be; most mines were placed a few inches under the ground, thus by walking over it you were guaranteed to be could be killed or seriously injured (McManus 1998: 62). Due to the fact that mines were a common and serious threat during World War II, positions

in the U.S. Army were created with the sole purpose of finding and defusing mines. These men were called combat engineers. Yet, "you did not necessarily have to be in the engineers to get drafted into mine detail" (McManus 1998: 63). As a result, if there was a shortage of workers in the engineering unit, men would be pulled from other units to compensate. "Any typical infantryman would not have wanted to exchange places with his combat engineer buddy when it came time for mine-clearing detail" (McManus 1998: 63). This made it one of most feared job in the army. Not knowing where a mine was, or when it was your turn to be on 'mine duty', was another origin of stress for soldiers which was unique to World War II warfare.

Like the two previous wars, World War II soldiers also had to deal with the threat of disease while in battle. Although there were illness such as dysentery and malaria that would go through military camps, the most serious of these was what soldier's called 'Trench Foot'. Trench foot is when your feet are exposed to prolonged wetness, cold, and unclean elements. The result is numbness, swelling, and in most cases the death of the limb. Winter in Europe consists of continuous rain and frequent snowstorms. Men would walk knee deep in snow for hours from camp to camp, or have to wade through freezing streams and rivers during patrols, exposing them to these damp and cold conditions. "The cold and wet conditions made for major foot problems for American Soldiers. Although poor-quality footgear was a major factor in the epidemic of trench foot, or 'frozen feet,'…even the best foot gear could not have stood up to the conditions that soldiers sometimes faced (McManus 1998: 54)." Unfortunately, the only way to prevent or cure Trench Foot is to keep your feet dry and warm, but this virtually impossible to escape the cold and dampness while on the front lines. Not only was the possibility of contracting

Trench Foot daunting for most men, but once you had the disease you were often forced to perform all your duties with a numb and even dead foot. This was not was a continuous worry for soldiers and placed an abundance of stress on their emotional stability, but it was also physically taxing.

Despite the constant threat of weapons, disease, and enemy fire, there was one aspect of World War II warfare that held more weight; the length of a tour of duty directly impacted PTSD in soldiers. This was directly reflected in the rotation of troops in World War II. Although each battalion had their own rotational system, the universal rule in every unit was that soldiers were never sent back to the United States for sabbaticals. In fact, "Combat soldiers had little or no hope of rotation out of combat" (McManus 1998: 7). The only time troops were 'relieved of duty' was when they were rotated out of being in heavy combat on the front lines, only to return again in another few weeks (McManus 1998). Thus, combat soldiers fought throughout the entirety of the war.

What is interesting to note is the difference between the length of tours for combat soldiers and the length of tours of men in the air force. Unlike foot soldiers who never left the war front, men in the air force, "after 25 [later 50] missions were completed the airman was sent back to the States" (McManus 1998: 8). Airmen had significantly lower rates of PTSD during World War II. Therefore it is fair to assume that longer tour of duties had a direct impact on soldiers having Posttraumatic Stress Disorder.

However, all of these things added together created something even bigger within the soldiers of World War II. Being in a constant state of anxiety over disease, weapons, attacks from the enemy, and the total exhaustion of continuously caused the desensitization of thousands of soldiers. To be desensitized is to be less responsive to an

overwhelming fear, or action caused by multiple exposures to that situation and setting. In fact, soldier's found that the only way to emotionally endure the brutality of war was to purposefully produce this deadened feeling within themselves. "By working to numb himself, the soldier tried to diminish his sensitivity to what battle did to him, and what he had done to others, but he soon discovered that numbing was but a phase of larger process" (Linderman 1997: 75). Men's desensitization to stress, fear, and brutality is the first step in the larger process known as Posttraumatic Stress Disorder.

Viet Nam

The Viet Nam War was defined by the violent and overwhelming amount of guerilla warfare. Troops that witnessed villages being attacked, the killing of children, or the mutilation of a fellow soldier were exposed to a type of trauma which left countless soldiers saddled with long term psychological damage. Yet, what made this type of warfare even more destructive was the nature of the typical soldier. The average soldier saw combat in Viet Nam at the age of 19, which was significantly younger than soldiers from previous wars (Sonnenberg 1985: 6). Thus, such serious trauma had a different effect. The "young adult's moral order, the freezing of his social development (interpersonal and career), and the stunting of his emotional development (empathy), all of which occurs because it is necessary for fulfilling the soldier's role and is related to the premature encounter with morality" (Laufer 1985: 51). Therefore not only did it affect young soldiers differently, but it also changed and stunted how they emotionally matured.

Although there were changes in warfare tactics, the unique aspects of the Viet Nam War were the threats within camp. The most prominent of these was fragging; the act of attempting to kill a fellow soldier in the combat zone (Lepre 2011: 19). The term 'fragging' got its name the from fragmentation hand grenades, primary method used during an attack. This type of grenade was the weapon of choice because it explodes, leaving virtually no evidence to trace back to the perpetrator (Lepre 2011: 23). Yet, throughout the years men progressed to using handguns and other smaller weapons. As the war went on, the number fragging assaults only increased. "1970 saw the number of grenade incidents in the army double those of the previous year. Two hundred nine actual assaults were tallied… and sixty-two others were listed as possible assaults" (Lepre 2011: 47). The next year was no different. In 1971, the total number jumped up 124 incidents, making a total of 333 fraggings for that year. (Lepre 2011: 47). However, when the army was collecting statistical data on the number of fragging attacks they only counted incidents that fit the originally definition of the term 'fragging,' attacks using only explosives (Lepre 2011: 26). Although the above statistics show the prevalence of fragging during the Viet Nam War, they are inaccurate, and would in fact be higher.

While all men were susceptible to a fragging attack, the majority of targets were officers. In fact, in 1969 alone, 56 percent of all fragging incidents were against superior officers (Lepre 2011: 83). This shows that the only way soldiers knew how to handle their stress was to get rid of the people who ordered them into such stress. In fact, psychiatrists who examined may of the accused personnel determined that the soldiers' "poor judgment and lack of insight, paired with suppressed rage" led them to act out

against leadership and the army itself" (Lepre 2011: 30). Thus, it can be said that in most cases, fragging was the result of Posttraumatic Stress Disorder among soldiers.

However, attacks on fellow servicemen did not stop at officers, many incident reports of fragging involved racial violence. "The Black soldier of the late 1960s was much different than his predecessor who fought in America's earlier wars. Racial pride imbued by the civil rights movement transformed him into a man in search not only of equality but an appropriate societal position in which he could maintain his own ethnic identity" (Lepre 2011: 100). Thus incidents of violence within the armed forces mirrored the happenings found within U.S. society, adding a degree of tension to an already strenuous combat zone. Alongside violence between the races, there was also a large amount of racism. Countless black soldiers reported blatant racism throughout the armed forces. Some examples included but were not limited to; "the lack of products preferred by black personnel in post exchanges and clubs, harassment from military police, the use of racial epithets, display of the confederate battle flag, and alleged preferential treatment afforded to white troops regarding promotions, duty assignments, and the military legal system" (Lepre 2011:101). This lack of equality was another form of pressure for black soldiers. By worrying about racial tension and violence, another form of stress and trauma was forced upon black and white soldiers.

Iraq War

Going into the Iraq War the United States expected a short and somewhat passive occupation of Iraq. Initially government officially thought only 100,000 troops spread

throughout the country would be appropriate, but once it became evident that Iraqi government officials and Saddam Hussein loyalists would respond with violence it was clear that these preconceived notions were wrong and many more servicemen were needed (Lebovic 2010: 43). Due to the face that U.S. officials failed to anticipate the manpower needed more troops were sent. Unlike past wars, women now took major roles as soldiers. In fact, sample demographics show that approximately 12.4 percent of soldiers in Iraq were women (Ender 2009: 10). Another distinguishing characteristic of soldiers in Iraq was that unlike previous wars when eighteen and nineteen year olds made up the greater part of soldiers, the majority of servicemen and women were twenty-six years of age or older (Ender 2009: 10). This is a significant change in the result of war because now fully matured men and women were engaged in battle, rather than barely adult teenagers fighting. In terms of experiencing war, perceived threats from Iraqi rebels, violent stressors such as IEDs, exposure to civilian suffering, and alienation have all been found in Iraq, and have all been found to contribute to the risk of Posttraumatic Stress Disorder.

However, U.S. troops not only fought against Saddam Hussein loyalists, but also what has come to be known as the Iraqi Insurgency. The Iraq Insurgency is made up of a number of local militias who actively fought against the U.S. supported Iraqi government, U.S. troops, and even other militias. Although over forty different insurgent groups have been counted since the beginning of the war, there are a few which hold a majority of the power: the Ba'athists, the Islamic Army in Iraq, Revolution Brigades, and the Mujaheddin Army (Lebovic 2010: 48). These groups did not just fight violently**,** but also practiced illicit wartime conduct when fighting against one another. They "engaged

in wanton criminal behavior (confiscating property, kidnapping for ransom, forcing marriages, and killing tribal leaders, officials, and policemen"(Lebovic 2010: 49). The world of the soldier involved "violence, looting, and disorder," which combined to "created an environment in which lawless and attacks spread—and insurgent groups and militia organized, operated, and seized control eventually of entire neighborhoods and cities" (Lebovic 2010: 46). The victims of this environment were not limited to opposing militias, but in fact were often citizens, people of local government, and even American servicemen. This forced U.S. soldiers to open their minds to alternate forms of attack while serving in Iraq.

The weaponry used by insurgents also posed a large threat to soldiers completing a tour of duty in Iraq. Beside the use of small arms, the most common, and the most threatening weapon used was the improvised explosive device or IED (Lebovic 2010: 53). IEDs were mostly subtly planted on roads frequently used by the U.S. Army or in animal carcasses alongside the roads in order to take down as many convoys as possible. Although very similar to mines used in previous wars, what made the IED different was that they are detonated by an operator rather than being touch sensitive. Thus, "IEDs proved lethal against US troops while minimizing the attacker's exposure" (Lebovic 2010: 53). In fact, in May of 2007 alone there were 1,348 IED attacks (Lebovic 2010:61) Alongside IEDs, insurgents relied on a multitude of other weapons, such as rocket-propelled grenades and mortars when striking U.S. troops (Lebovic 2010: 53). Yet, the most gruesome tactic was that of the suicide bomber. A suicide bomber was usually a man wearing a vest rigged with explosives that when detonated would not only kill or injure those around, but would also kill the operator (Lebovic 2010: 53). There was

almost no way for U.S. troops to stop a suicide bombing because these vests were virtually undetectable. Suicide vests were also worn while “driving cars and trucks rigged with [other] explosives” to make what is called a VBIED, a vehicle-borne improvised explosive device (Lebovic 2010: 53).

Not only did these tactics prey on the vulnerability of U.S. forces, but they were also used against what are called ‘soft-targets’. Such soft-targets included government officials and diplomats, but mainly were civilians; “young men lined up at army and police recruiting stations, funerals for those slain in the violence, religious ceremonies, and markets—to increase the challenges for the defense and to maximize the symbolic impact of an attack” (Lebovic 2010: 54). This added a new dimension to the role of the soldier. Instead of just worrying about attacks on U.S. soldiers and keeping the peace between rebel groups, they also became responsible for keeping local officials and civilians safe. In fact, civilian safety became a main concern for U.S. troops. According to a survey by the World Heath Organization, the number of violent civilian deaths during the U.S. occupation reached 151,000 in three years (Lebovic 2010: 55). That is considerably more than the 15,000 insurgent deaths and significantly more than the 3,807 military deaths (Ender 2009: 131). Civilians became one more burden for soldier to carry during the war.

Another possible cause of PTSD was the alienation, boredom, and lowered moral experienced by soldiers serving in Iraq. One such form of alienation came in soldier housing. While on bases in Iraq, soldiers lived in what was called a dry trailer; which had “three rooms with separate entrances, an air-conditioner-heater combination, and a window” (Ender 2009:21). Although there were common areas in the center of base, the

lack of communal space in the housings created a conversion to more privacy but also more isolation. “The emphasis on providing relative individual privacy was at the expense of shared social spaces that structurally restricted informal soldier-soldier and soldier-leader interaction during leisure time on the [base],” in order to talk and debrief on the day’s traumatic events (Ender 2009: 27). This overabundance of privacy takes away the soldier’s natural response to share and discuss emotional issues, which in turn can build up and manifest itself as Posttraumatic Stress Disorder.

Boredom was also found to be a major source of anguish for troops in that it endorses the feeling of being confined to a space and getting lost in time. Military sociologist Morten Ender discusses such boredom in his book *American Soldiers in Iraq* (2009). In his research he found that for soldiers, life in Iraq became habitual and monotonous. In fact “many combat soldiers referred to their convoy missions as *Groundhog Day*- referring to the 1993 film…The *Groundhog Day* film reference implies less boredom in terms of time doing things—there was always something to do. The meaning is derived from the quality of day-to-day accomplishments during the long days” (Ender 2009: 20). Thus, quality of life and daily activity were at an all time low in Iraq. A 2003 study by the U.S. Army mental health advisory team assessed the moral of troops at different points throughout the year and found it significantly low; from a sample of 756 soldiers, 52 percent reported “low and very low personal moral,” and 72 percent reported low unit moral “The 2003 study by a U.S. Army mental health advisory team assessed morale at two points in time and found it markedly low. With a sample of 756 soldiers, more than half (52 percent) reported low and very low personal morale, and almost three-fourths (72 percent) reported the same for unit moral” (Ender 2009: 43).

Individually, alienation, boredom, and markedly low moral are not necessarily destructive things. Yet, when combined together and surrounded by violence and trauma, they can easily become a stimulus for PTSD.

CHAPTER SIX

TREATMENT OPTIONS

"Must you have battle in your heart forever?
The bloody toil of combat?"

-Homer, Odyssey

CIVIL WAR

In the 1800s mental disease was not viewed as medical problem, but rather a social one. Thus, all those suffering from any type of psychological disturbance were placed together under one roof in what we now call an Insane Asylum. Although such asylums first appeared almost a century earlier, there were only a handful of institutions at the beginning of the Civil War. Yet, by 1880 the there were at least 140 state insane asylums along side over a dozen privatized institutions (Dean 1997: 136). These 140 facilities were the primary place of treatment for Civil War veterans.

However, before veterans were sent to these Insane Asylums, they were cared for in the privacy of their home by friends and family. This mostly consisted of emotional support, but a family's inability to relate to the turmoil of war often further isolated their loved one (Dean 1997). The anguish experienced by these men often resulted in outbursts of violence causing family members to resort to physical restraints. This consisted of men

being locked in a room with “barred windows and a reinforced, locked door”, and in extreme cases imprisonment by local police (Dean 1997: 142). A soldier’s emotional suffering often took a toll on family members. Thus when the situation required such drastic measures due to violence, it became clear that institutional care was necessary.

Although Insane Asylums also housed economically and socially dependent people such as widows and the homeless, at the end of the Civil War they primarily cared for war veterans. Due to the lack of knowledge regarding emotional trauma at the time, patients were admitted for a wide array of mental disorders such as; insanity, disease of the head, affection of mind, hysteria, and nervous trouble, all of which categorize what we now call Posttraumatic Stress Disorder (Dean 1997: 144).

Once a patient was fully enrolled in an asylum, medical personnel administered what they called “moral therapy” (Dean 1997: 141). Part of ‘moral therapy’ consisted of veterans working during their stay. Work details would range from farm labor to cleaning the kitchen. Yet, the majority of their time at the asylum consisted of “recreation, adequate rest, and periodical social and intellectual exercises such as dances, plays, or lectures” (Dean 1997: 136). Mental health therapy at this point in time focused on calming one’s mind, rather than attempting to solve the problem through therapy.

In moments where patients would suffer from ‘mania spells’ and become violent, restraints were seen as an effective way to ‘cure’ veterans of violence. The most common form of restraint was the straightjacket, which protected the men not only from hurting others, but also from hurting themselves. (Dean 1997). However, the majority of doctors favored medication as way to sedate and deter veterans from violence. Most doctors preferred sedatives such as morphine, potassium bromide, and chloral hydrate to still

patients during their violent episodes (Dean 1997: 142). Yet, these were not the only medications used to calm maniacal patients. Purgatives, herbal substances used to empty the bowels, were often used to "restore the ideal balance among the body's vital forces", while whisky was frequently prescribed to build up strength (Dean 1997: 142). These medications only calmed veterans by inducing sedation with drugs such as morphine, or by forcing them to drink alcohol to numb their inhibitions. This may have appeared to be a solution, but neither physical restraints nor drugs address the psychological turmoil that comes along with Posttraumatic Stress Disorder.

World War I

The early 1900's were a lost time for psychiatry. Although there were civilian hospitals for mental disorders, psychologists as well as physicians, were unprepared for the mental turmoil that would plague numerous young men returning home from war. In the years directly following the end of World War I, 12 out of every 1,000 soldiers were hospitalized each year for some sort of psychological malady (United States Army Medical Department 1966: 9). This was a significant increase from the pre-war hospitalization rate of 3 out of every 1,000 soldiers per year (United States Army Medical Department 1966: 4). These staggeringly high post-war statistics are confirmation that combat takes a toll on the psyche of the soldier. Two more data sets compiled by the United States Army Medical Department in 1966 corroborate the emotional cost of experiencing war. According to their study, the Army Medical Department found that not only were Mental Disorders "the largest cause for medical discharge" during the war, but

also that “suicide was the leading cause of death in military personnel” after the War (United States Army Medical Department 1966: 9). Not only does it show the significant number of soldiers suffering from ‘combat neurosis’, but it also shows the severity of the symptoms and the need for adequate treatment.

Prior to World War I, there were no government sponsored mental health facilities. As a result, Dr. Thomas W. Salmon, president of the National Committee for Mental Hygiene (NCMH) at the time, offered the Committee’s services and resources to the Army Surgeon General only moments before the United States entered the war (United States Army Medical Department 1966: 6). By doing so the NCMH became responsible for planning the management and treatment of psychiatric disorders that would plague American soldiers. However, they were also responsible for “the recruiting and training of psychiatrists, neurologists, psychiatric nurses and attendants, and social workers” who would soon be running these new psychiatric wards in preexisting Army hospitals (United States Army Medical Department 1966: 6).

Due to the fact that psychological responses to combat were relatively unstudied during World War I, treatment options in these new clinics were just as vague. There was a large trend towards ‘trial and error treatment’ during the early years of the war. For example, “treatments could routinely include electric therapy, but also hypnotism,” as ways of breaking the patients symptoms (Lesse 2002: 35). Yet, no matter the treatment path, every physician’s goal was to try and rid patients of their symptoms in order to immediately return them to active duty. This mindset caused doctors to rush treatments, ignore symptoms, and push men suffering from what we now know as Posttraumatic Stress Disorder back into combat.

World War II

Throughout the duration of World War II, it became increasingly apparent that the number of psychological casualties was continuing to rise. Even though doctors and psychiatrists made an effort to treat as many patients as they could, they were weighed down by the lack of facilities. Initially, men suffering from bouts of mental illness were housed in hospitals alongside those with physical injuries; but it soon became clear that "if proper treatment were to be given psychiatric patients, they would have to be concentrated in specially designated centers" (United States Army Medical Department 1966: 275). This only came to fruition during the last year of the war; in 1944 a handful hospitals were designated to become neuropsychiatric centers for Military personnel only (United States Army Medical Department 1966: 275). Although this was a step in the right direction, it was almost impossible to find experienced, and well-trained hospital personnel to work in these neuropsychiatric facilities (United States Army Medical Department 1966). In fact, due to this lack of manpower, the majority of the staff at these hospitals were volunteers from the Red Cross or other local organizations (United States Army Medical Department 1966: 275).

Despite the lack of facilities and trained medical personnel, treatment was still given to soldiers suffering from mental illness. The treatment programs in such hospitals went through many changes throughout the War, and were different at each site. Yet every hospital had a relatively similar plan; "psychotherapy, generally group, from 3 to 5 times a week; occupational therapy, 3 to 5 times a week; and daily physical

reconditioning in the form of calisthenics, walks, or gymnasium work" (United States Army Medical Department 1966: 281). This was a reasonably extensive routine for soldiers, and proved to be successful compared to those who received no treatment. As time went on, treatment plans evolved and began to incorporate recreational activities such as fishing, baseball games, swimming, and a multitude of other competitive sports (United States Army Medical Department 1966: 281). This proved to be a positive outlet of energy for many soldiers.

Although therapy was the preferred form of treatment for soldiers with combat induced psychiatric issues, medical techniques also administered when needed. One such method was the use of wet-packs (United States Army Medical Department 1966: 275). Wet-packing is the process of wrapping patients in layers of cold sheets, underneath one large, heated blanket and were used to calm obviously agitated patients (Rayner 1914). In cases of violent patients, sedation was often used. The most common sedative used during World War II was Sodium Amytal (amobarbital sodium), which immediately tranquilized patients who presented as a threat to themselves or others (United States Army Medical Department 1966: 275). Although such medicinal treatments were given, talk therapy was considered a better solution for those suffering from mental illness, including symptoms of Posttraumatic Stress Disorder.

Vietnam

By the end of the War it became clear to government officials that Viet Nam veterans were struggling to conquer their PTSD and were in dire need of assistance.

The nation's response to the psychological needs of veterans was the creation of Viet Nam outreach and counseling centers. Created by the Veterans Association in 1979, the sole purpose of these centers was to treat mental health issues and to help with the readjustment of veterans coming home (Blank 1985: 229). These VA facilities provided a multitude of services for suffering veterans including:

1. Counseling and psychotherapy-individual, group, and family;
2. Educational and employment counseling;
3. Vocational and educational testing at certain locations
4. Psychological testing at certain locations;
5. Counseling concerning Veterans Administration and other government benefits and procedures, which may include technical information concerning discharge upgrade, benefits, etc.;
6. Community education about the Viet Nam experience and the problems and strengths of Viet Nam veterans; and
7. Consultation with professionals about PTSD and other war veteran readjustment problems

--Blank 1985: 236

These programs were utilized by 62% of veterans suffering from PTSD (Schlenger, Hough, and Marmar. 1990: 201). Thus, it is clear that what made such VA centers so successful was the attention paid to education, and social rehabilitation alongside emotional therapy.

Two types of therapy were primarily used in the treatment of PTSD: individual therapy and group therapy. Individual therapies consists of a one-on-one discussion between a patient and a trained mental health professional; where the goal is to "to resolve any crisis, build trust in the therapist," and lessen the symptoms of PTSD (Williams and Williams 1985: 207). Group therapy, on the other hand, includes more than one patient, and is an open forum for participants to share and give advice to one another. The role of the psychologist is different as well. Instead of having an equal role

in the conversation like in individual therapy, the psychologist is more of a facilitator rather than the dictator of the process. Although this sounds more relaxing, patients must put in a serious amount of time and effort for the work done in group therapy to be effective. Such work includes "PTSD education, grief work, desensitization, cognitive restructuring, teaching interpersonal skills, developing support networks, problem solving, learning adaptive coping skills, stress management, conflict containment and resolution, reinterpretation and integration of experience, and discrimination of current life-style behaviors from war context behavior and personality**"** (Williams and Williams 1985: 207).

However, one such form of group therapy, rap group therapy, was not so successful. The rap group therapy model loosely resembles that of the group therapy previously mentioned. Yet what is different is that these group sessions are often leaderless, meaning no psychologist or mental health professionals were present during group meetings (Smith 1985: 167). Although this self-help and peer support method sounds positive, it was often more destructive than therapeutic. "On several occasions, on hospital units where therapists brought patients with post-traumatic stress disorder together, rap groups were created. Soon the ward staffs would be stunned and terrified to see this critical mass of veterans suddenly stirring each other up, asserting control over the ward, and terrorizing the therapists and the hospital population" (Smith 1985: 168). This made for an unsafe environment for physically, and psychologically.

Although talk therapy was the first choice in terms of the treatment of Posttraumatic Stress Disorder in Viet Nam veterans, it was not the only type used. One such alternative was called narcoanalysis. Narcoanalysis is the recall of repressed

material by placing the patient in a drug-induced hypnotic state with a therapist present to analyze any material found (Kolb 1985: 214). This technique was recommended only for hospitalized patients with "severely impairing recurrent dissociative states in which the usually effective avoidance defenses have failed" (Kolb 1985: 213). Narcoanalysis was not prescribed to everyday veterans, but was for extreme cases where patients presented specific symptoms. Such indicators are:

1. Recurrent episodes of abnormal behavior in which the individual became aggressively threatening or violent, sometimes identifying himself as being in Viet Nam or identifying others as enemies in Viet Nam, followed by amnesia for the event.
2. Persistent amnesias related to combat experience.
3. Absence of affective response in recounting devastating combat trauma.
4. Repetitive panic attacks unrelieved by prior therapeutic efforts.
5. Chronically persistent and recurrent pain complaining behavior.

--Kolb 1985: 216

Due to the specificity of the symptoms and treat procedure, narcoanalysis was only performed by trained psychologists who understood the complexities of combat induced Posttraumatic Stress Disorder.

Despite the many types of therapy offered to Viet Nam veterans, many chose to self medicate. Although alcoholism was prevalent, the majority of suffering veterans choose drugs as their medication of choice. Yet, unlike most self-medicators who begin using drugs after the traumatic event, Viet Nam Veterans began their drug habits while stationed in Viet Nam. The most common drugs used were "marijuana, opium, and morphine [which] were readily available to troops" through out the entirety of the war (Lepre 2011:112). As the war went on, more and more soldiers began using drugs while in a combat zone. Statistics published by the Army show the number of drug related personnel detentions within camps rise with each year.

YEAR	DRUG APPREHENSIONS
1965	47
1965	344
1967	1,722
1968	4352
1969	8,446
1970	11,058
1971	11,161

Lepre 2011: 113

Although this is related to drug apprehensions from disciplinary records, it stands as a good example of rate of drug use in the population of bases in Viet Nam as a whole. The rise in drug use confirms the notion that as combat grew more intense, and as soldiers experienced more traumas, they used more drugs as coping and self-medication method.

Iraq War

Unlike previous wars, the assessment and final diagnosis of Posttraumatic Stress Disorder was the first step in the treatment process for Iraqi War veterans. This has proved to be an important first phase because by completing a comprehensive assessment, the clinician will be able to formulate a treatment plan specific to each soldier's individual and unique needs (U.S. Department of Veterans Affairs 2007). These evaluations primarily hone in on six variables to help assess how to work with a veteran of the Iraq War: work functioning, interpersonal functioning, recreation and self-care, physical functioning, psychological symptoms, and deployment related experiences (U.S. Department of Veterans Affairs 2007).

Veterans place a lot of value in the ability to complete their duty as soldiers. Therefore, when looking for PTSD work function is a primary concern. "Work-related difficulties have a significant impact on self-efficacy, self-worth and financial stability"

(U.S. Department of Veterans Affairs 2007). These types of insecurities stem from suffering from Posttraumatic Stress Disorder, but can quickly become symptoms themselves. Thus, these deserve significant amounts of attention from mental health professionals.

Like all people, veterans have important relationships in their lives. Unfortunately, the psychological consequences of having PTSD can take a toll on many of these interpersonal relationships. Having PTSD is not the only variable to affect such relationships, "a number of factors can affect interpersonal functioning including the quality of the relationship pre-deployment, the level of contact between the Veteran and his or her social network during deployment, and the expectations and reality of the homecoming experience" (U.S. Department of Veterans Affairs 2007).When assessing for PTSD, clinicians look to see if these interpersonal relationships have been affected, and in what way PTSD has affected them.

It is also important to address the self-care and physical functioning of Iraq war veterans suffering from PTSD. Often times those suffering begin to neglect their health and any form of recreation, which when done "are foundational aspects of positive psychological functioning," making it an important factor consider during the initial assessment of PTSD (U.S. Department of Veterans Affairs 2007). They physical wellbeing of veterans in general is extremely important. "Sleep, appetite, energy level, and concentration can be impaired in the post-deployment phase as a result of exposure to potentially traumatizing experiences, the development of any of a number of physical disease processes and/or the sheer fatigue associated with military duty" and eventually manifest itself as PTSD (U.S. Department of Veterans Affairs 2007). Therefore, by

addressing the physical condition of patients a magnitude of information can be discovered about a veteran's Posttraumatic Stress Disorder.

The last two variables used during an initial assessment of PTSD are psychological symptoms and deployment related experiences (U.S. Department of Veterans Affairs 2007). These refer to analyzing a veteran's overall psychological functioning while experiencing symptoms of PTSD, from the combat induced trauma experienced at war. It is important to know what symptoms a patient is experiencing, and how they deal with those symptoms, in order for mental health professionals to adequately prescribe an affective treatment. Yet, knowing what form of trauma a soldier experienced while in Iraq is equally important, if not more, during the first assessment. This allows proper treatment methods to be administered and gives clinicians powerful insight into how the soldier responds to the previous five variables of PTSD.

Psychotherapies continued to be the primary form of treatment, yet in some cases medications were also used to treat Posttraumatic Stress Disorder. However, unlike psychotherapy methods, medications address the biological basis of PTSD symptoms. Unfortunately, only two medications for the treatment of PTSD are FDA approved: Paroxetine (Paxil) and Sertraline (Zoloft), nevertheless many others are prescribed (U.S. Department of Veterans Affairs 2009). Yet, all medications recommended for treating PTSD "act upon neurotransmitters related to the fear and anxiety circuitry of the brain," primarily serotonin and dopamine (U.S. Department of Veterans Affairs 2009). Thus, medications for PTSD are aimed at three principle symptoms: anxiety, depression, and mood.

Selective Serotonin Reuptake Inhibitors (SSRI's) are the leading form of drugs used to lessen symptoms of anxiety. SSRI's work by affecting the neurotransmitter and increasing the amount of serotonin released (U.S. Department of Veterans Affairs 2009). In turn levels of anxiety, appetite, and sleep patterns are affected. Common SSRI's include FDA approved Paxil, as well as Sertralin and Citalopram (U.S. Department of Veterans Affairs 2009). By taking Selective Serotonin Reuptake Inhibitors, symptoms of combat induced anxiety are lessened for soldiers coming back with Posttraumatic Stress Disorder.

Depression is the second major symptom of PTSD that medications attempt to address. Most commonly prescribed are Norepinephrine Reuptake Inhibitors (NRI's), such as Ulmirtazpine and Nefazodone (U.S. Department of Veterans Affairs 2009). NRI's change the level of the naturally occurring brain chemicals serotonin and norepinephrine. By altering the amount of chemicals neurotransmitters work better to communicate between one another, and in turn easing some patients depression.

The third type of drug most commonly used in cases of Posttraumatic Stress Disorder are mood stabilizers. Unlike medications for anxiety and depression, mood stabilizers are mostly given with antidepressants in order to help stabilize and avoid possible manic episodes (U.S. Department of Veterans Affairs 2009). Thus, by taking stabilizers like Lamotrigine or Carbamzepine, soldier's suffering from PTSD are given another tool to help control their depressive symptoms while also treating manic episodes and severe mood swings.

CHAPTER SEVEN

Conclusion

> "What a cruel thing is war: to separate and destroy families and friends, and mar the purest joys and happiness God has granted us in this world; to fill our hearts with hatred instead of love for our neighbors, and to devastate the fair face of this beautiful world."
>
> - Robert E. Lee

Posttraumatic Stress Disorder is not a new phenomenon for the American Soldier. It has been a part every war, and can be seen in specific areas of Military life and combat. I chose to focus on four possible areas; training, men's natural aversion to killing, pre-deployment medical exams, type of warfare, and treatment options during four different wars, in order to demonstrate how PTSD can arrise. After examining each war, and the possible triggers of Posttraumatic Stress Disorder found in the four main areas, while taking into account the history of the disease, my research resulted the following findings:

Although combat training is extremely important to the survival and success of our troops, it can also have psychological consequences. What I found to be most interesting in terms military instruction was the use of hate as motivational technique. Soldiers are taught to despise and even dehumanize the enemy in order to effectively

complete missions and kill their opponents. What I wonder is wouldn't this vicious way of thinking and the behaviors it incites also dehumanize our troops as well? It has been proven that when paired with realistic combat exercises and the depersonalization of the individual soldier, the psychological state of soldiers will be weakened (Bourke. 1999). Causing our soldier's to be more susceptible to Posttraumatic Stress Disorder in order to ensure troops obey commands and to kill the enemy.

However, one thing continuously prevailed over all forms of Military training; humans natural aversion to killing. This primal instinct to preserve the life of our fellow humans was evident in the behavior of soldiers in every war. Men fighting in the Civil War would load and reload their weapons multiple times in order to avoid having to fire it at the enemy because they couldn't kill. World War I and II were no different; soldiers would suffer conversion hysteria and lose control of their bodies when in combat, or as in World War II, a majority of men wouldn't fire their weapons at all. Yet, the Viet Nam was different in that the enemy was so dehumanized it resulted in the need to overkill and in the execution of a large number of innocent civilians. Last but not least, this was also seen in the Iraq War; soldiers had become so desensitized by long-distance warfare that the guilt of killing was revealed in their language and actions. All in all, after doing this research, it became clear in each war that balancing a mans natural aversion to killing a fellow man and his duty as a soldier has a psychological effect on the men and women fighting for our country.

The pre-deployment medical exams given to soldiers also play an important part in the mental health of soldiers fighting in battle. The primary purpose of medical exams is to identify subtle and specific mental health problems that can negatively affect a

soldier's performance and or health. However, Military medical exams have not always been as thorough as they are today. In the Civil War, there was only a visual "test" that looked for any obvious physical wounds. Fifty years later, at the start of World War I, there was now psychological testing. Yet, military medical officials thought to only look for obvious mental defects. Thus, the idea of psychological predispositions was ignored and only 2% of draftees were rejected. By World War II, the Armed Forces had taken important steps forward and had a specific psychological testing. However, the criteria and restrictions of such mental illnesses were continuously changing throughout the war, causing men to fall through the cracks. During the Viet Nam War, medical officials had increased screening techniques, increasing the percentage of draftees rejected at induction. Yet, the needs of politicians became more important, and with Project 100,000, men previously rejected due to psychiatric reasons were admitted into the Army. With the Iraq War, not only has the number of tests increased but they have also become specific for each position within the Military, making it even harder for psychologically concerning soldiers to slip through the cracks. There is obvious growth in the history of pre-deployment medical exams. With each war more and more tests appear, prohibiting those who could become psychological casualties from entering the Armed Forces. When analyzing this research it becomes clear that the increasing rate of those leaving battle with Posttraumatic Stress Disorder is an indication of the importance of pre-deployment medical exams and screenings.

With each war came a new method of fighting battle. Throughout the years the type of warfare changed from the threat of disease and hand-to-hand combat of the Civil War, through the fragging of Viet Nam, and the suicide bombers and IED explosives of

the Iraq War. These new battles also brought new weapons; the first tank and the first use of gas was presented in World War I, while the first bazooka, flamethrower, and mine was seen in World War II. Yet with each new weapon came malfunctions, and soldiers often feared using their own equipment. All of the fear, stress, and brutality of each type of warfare caused countless soldiers to develop symptoms and in many cases procure Posttraumatic Stress Disorder.

The use of psychiatric treatment for symptoms of PTSD was the one thing all four wars had in common. However, methods of treatment changed from war to war. Treatment for veterans of the recent Iraq War consisted of in depth psychotherapy that targets six main areas of life: work functioning, interpersonal relationships, recreation and self-care, physical functioning, psychological symptoms, deployment related experiences. Yet, treatment was not always this specific or thorough for psychiatric patients. During the Civil War there was no talk therapy, but only recreational activities, and physical restraints such as straight jackets for extreme cases. This slowly improved in World War I when medical professionals began using other forms of treatment such as electrotherapy and hypnotism. Although this was a step in the right direction, psychological responses to combat were relatively unstudied at the time, so these types of therapies were very vague in their methodology. This all changed in World War II, when the first specialty centers for neuropsychological patients; where their focus was on individual and group psychotherapy. These facilities led the way for the veteran outreach programs and centers that surfaced during the Viet Nam War. This was an important step for the treatment of Posttraumatic Stress Disorder because this was the first time society was taking the issue of psychologically damaged veterans into their own hands. At the

conclusion of my research it has become clear that treatment, and the specific type of treatment of psychological symptoms is a deciding factor in whether or not someone gets PTSD. Including the extent of their symptoms, and how well they heal from combat trauma.

There is a psychological response and consequence to military training, killing when there is an innate aversion to killing a fellow human being, pre-deployment medical exams, different types of warfare, and the treatment options. Individually, each of these groupings is a trigger for stress, depression, fear, and anxiety for our troops. Yet, when all of these factors come together, they comprise the everyday life and activities of American soldiers. Although each war presented different findings that were specific to the era, the answer was always the same: no matter they type of training, form of pressure to kill, style of medical exam, manner of warfare, or treatment option, they all resulted in symptoms of psychological turmoil. The psychological issues that accompany each of these categories may not be emotionally overwhelming, but when experienced simultaneously they easily prompt Posttrumatic Stress Disorder, as seen in the Civil War, World War I, World War II, Viet Nam, and the Iraq War.

Unfortunately, throughout the history of war in the United States there has been a shame and disgrace attached to Posttraumatic Stress Disorder. For the soldier, this has often meant dishonor in his career and on the home front. In my opinion, it is because of the stigma surrounding PTSD that more and more men and women suffer from the psychological effects of combat at alarmingly high rates. By changing this stigma, I believe that training methods, pre-deployment medical exams, and treatment techniques will adequately adjust to the demands of such a threatening disease.

Training for the armed forces requires; tenacity, strength, endurance, and discipline in order sufficiently prepare a soldier for battle. However, along side training for the physical and tactical demands of war, there is also a need for psychological conditioning; i.e. teaching soldiers how to cope with stress, anxiety, and fear that accompanies war while already in battle. While this seems simple and expected to already be a party of military training, it in fact is not. Such symptoms are only dealt with after the fact, causing significant damage to the emotional state of many soldiers. In my overall assessment of Posttraumatic Stress Disorder I have come to believe that the negative stigma surrounding the illness is the reason why it is not addressed during the training period. Military officials seem to avoid directly approaching the subject of PTSD, and let it hang in the air even though both new and old soldiers are aware of the illness. This is due to the dishonor that has historically been connected with PTSD. The idea of Posttraumatic Stress Disorder as a whole scares military training officials. It reminds them how fragile human beings are, and of the horror stories they've heard about dishonorable discharges, and isolation from loved ones, from those who've contracted the disease during battle. Thus, they disregarded the issue when training new recruits. By ignoring PTSD, and letting the stigma dictate their actions, training officials cause more harm than they know. Just by adding information and training sessions about Posttraumatic Stress Disorder, and coping mechanisms that can be used during battle, every soldier would enter combat with the psychological strength to recognize their symptoms, and the personal tools to address them and help themselves.

The bad reputation that follows Posttraumatic Stress Disorder also affects the pre-deployment medical exams of those who sign up for the Armed Forces. Although mental

illness in general as well as possible predispositions for mental illness are thoroughly examined for in new recruits, there are still ways the negative stigma of PTSD are handicapping the process. Military psychologists seem intimidated by giving the diagnosis of PTSD, and what it means for the Army as a whole rather than how it affects the individual. It seams to be a measure of cost saving; once medical officials diagnose someone with PTSD they have to treat them. So it is not just that they do not want the Armed Forces to have a bad image, but also that they do not want to limit services. By erasing the idea that is shame in having PTSD I believe medical personnel will be more inclined to examine soldiers periodically, rather than only before deployment. This way, soldiers experiencing symptoms of PTSD can be red flagged, and have their problems addressed immediately. Thus, the number of psychological casualties will go down because treatment would be administered during a tour of duty when symptoms are new, rather than fully manifested in the psyche of the soldier.

The disgrace and dishonor that encircles Posttraumatic Stress Disorder also affects how soldiers and Military officials view treatment. While there is negative opinion of the disease in general, there is even more disdain surrounding treatment. Due to the many consequences of having PTSD, it has become a mark of weakness in the Army to ask for help. This outlook has been created by the negative views of those who have PTSD as pathetic, inadequate, and unmanly. This causes soldiers who need treatment for PTSD to hide their symptoms and avoid any form of professional care because of the shame they have about their illness. Not only does this make our soldiers suffer longer, but in many cases this can also worsen their symptoms. The question that comes to mind for me is why is there shame in asking for help to relieve the pain of

PTSD, but it is acceptable to seek treatment for any form of physical wound? Once again, all my research points towards the stigma against Posttraumatic Stress Disorder as the answer, and for the reason why it has become socially unacceptable within the Armed Forces to seek treatment. By eliminating this attitude, those suffering from the invisible psychological wounds of PTSD will be able to obtain treatment without shame or dishonor.

How then do we get rid of this negative stigma? I believe the answer is education. The Army needs to educate its members on Posttraumatic Stress Disorder. This encompasses not only the general definition and symptoms, but also in depth discussions about coping mechanisms, self-help techniques, and treatment options that can be utilized before, during, and after deployment. Yet in my mind, the most important point to focus on is how prevalent PTSD is in the Armed Forces. By sharing statistics along with personal narratives from those suffering with the disease there may be a way to change how people view Posttraumatic Stress Disorder in the Military; therefore showing that it is a common response to combat. Once the Army accepts and modifies their opinion of the disease then soldiers loved ones, as well society as a whole, will also change their view of PTSD.

Yet, in order for society to change its negative scrutiny of soldiers coming home with PTSD they too need to be educated. In today's world, there are a few national campaigns, such as the "Real Warrior" and "Invisible Wounds" organizations that aim to inform society on what PTSD is, how it affects our soldiers, and what you can do to help. In spite of these important campaigns, I believe real change will come from small-scale forms of education, such as community events, or even classroom discussions. In

conclusion, by erasing the negative stigma surrounding the disease through education, will veterans returning home from war with Posttraumatic Stress Disorder be able to truly heal.

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