University of Miami Law School **Institutional Repository**

University of Miami National Security & Armed Conflict Law Review

7-1-2015

A High Price to Pay: Combat Injury in Iraq and Afghanistan

George D. Garcia

Follow this and additional works at: http://repository.law.miami.edu/umnsac



Part of the Military, War and Peace Commons, and the National Security Commons

Recommended Citation

George D. Garcia, A High Price to Pay: Combat Injury in Iraq and Afghanistan, 5 U. Miami Nat'l Security & Armed Conflict L. Rev. 55

Available at: http://repository.law.miami.edu/umnsac/vol5/iss1/7

This Contribution is brought to you for free and open access by Institutional Repository. It has been accepted for inclusion in University of Miami National Security & Armed Conflict Law Review by an authorized administrator of Institutional Repository. For more information, please contact library@law.miami.edu.

A High Price to Pay: Combat Injury in Iraq and Afghanistan

George D. Garcia, MD, FACS*

Table of Contents

I. INTRODUCTION: THE ROAD TO WAR

We must be ready to dare all for our country. For history does not long entrust the care of freedom to the weak or the timid. We must acquire proficiency in defense and display stamina in purpose.

-Dwight D. Eisenhower, First Inaugural Address, January 20, 1953¹

^{*} Lieutenant Colonel (Retired), US Army, Assistant Professor of Surgery, University of Miami Miller School of Medicine, DeWitt Daughtry Family Department of Surgery Division of Trauma, Surgical Critical Care and Acute Care Surgery. The author would like to thank Tara M. Irani, University of Miami School of Law Class of 2016 for the invitation to participate in the November 2014 NSAC Symposium and for assistance in editing this manuscript. The author would also like to thank Editor in Chief Michael Kranzler, Chief Symposium Editor Laura Scala, and Executive Managing Editor Jessica Sblendorio for the opportunity to present at the Symposium and publish this manuscript.

¹ First Inaugural Address, PBS American Experience, http://www.pbs.org/wgbh/americanexperience/features/primary-resources/eisenhower-inaugural53.

On the morning of September 11, 2001, four fully-fueled commercial airliners bound for West Coast destinations, American Airlines Flight 11 (traveling from Boston to Los Angeles), United Airlines Flight 175 (traveling from Boston to Los Angeles), American Airlines Flight 77 (traveling from Dulles, Virginia to Los Angeles), and United Airlines Flight 93 (traveling from Newark, New Jersey to San Francisco), were hijacked by nineteen men.² At 8:46 a.m. Eastern Standard Time, American Airlines Flight 11 was deliberately flown into the North Tower of the World Trade Center in New York City.³ Seventeen minutes later, at 9:03 a.m., United Airlines Flight 175 was flown into the World Trade Centers South Tower. 4 One hundred and two minutes later, both World Trade Center towers had collapsed and 2,753 people were killed.⁵ Among the dead at the World Trade Center were 343 New York City firefighters, twenty-three police officers and thirty-seven Port Authority Officers. 6 At 9:37 a.m., American Airlines Flight 77 was flown into the Pentagon Building in Arlington County, Virginia where 184 people were killed. At 10:03 a.m., United Airlines Flight 93 crashed into a field near Shanksville, Pennsylvania, killing all forty passengers and crewmembers aboard.8 It is believed that the hijackers crashed the plane in that location, rather than their unknown intended target, when passengers and crewmembers attempted to retake control of the flight deck.⁹

This terrorist attack on the United States was orchestrated by Osama bin Laden, the leader of the terrorist organization known as al Qaeda, which operated under the protection of the Taliban regime in Afghanistan. One week after the attacks of September 11, President George W. Bush signed into law a joint resolution authorizing the use of force against those responsible for attacking the United States. On October 7, 2001, the U.S. military, with British support, began a bombing campaign against Taliban forces, officially launching Operation Enduring Freedom to stop the Taliban from providing a safe haven to al Qaeda and to stop al Qaeda's use of Afghanistan as a base of operations

² September 11th Fast Facts, CNN Library, http://www.cnn.com/2013/07/27/us/september-11-anniversary -fast-facts.

^{&#}x27; Id.

⁴ *Id*.

⁵ *Id*.

⁶ *Id.*

 $^{^{7}}$ Id

⁸ September 11th Fast Facts.

Id.

Operation Enduring Freedom Fast Facts, CNN Library, http://www.cnn.com/ 2013/10/28/world/operation-enduring-freedom-fast-facts.

¹¹ U.S. War in Afghanistan, Council on Foreign Relations, http://www.cfr.org/afghanistan/us-war-afghanistan/p20018.

for terrorist activities.¹² The first wave of conventional ground forces arrived twelve days later.¹³

Concurrent with the execution of Operation Enduring Freedom, U.S. intelligence agencies conducted investigations into Iraq's possible connection to al Qaeda. In a January 2002 speech, President Bush identified Iraq as one of several "rogue nations" that financed or trained terrorists. 14 The U.S. administration pointed to intelligence that seemed to indicate that Iraq was negotiating with Niger to purchase vast quantities of uranium yellowcake—a product associated with the production of uranium ore—with the intent of developing weapons of mass destruction.¹⁵ On February 5, 2003, U.S. Secretary of State Colin Powell made the case to the United Nations that Iraqi President Saddam Hussein posed an imminent threat. 16 On March 15, President Bush gave Saddam Hussein and his sons forty-eight hours to leave Iraq or face military action, an order they defied. ¹⁷ After gathering the support of a small contingent of international supporters, including Britain, Belgium, and Spain, President Bush gave the order to launch Operation Iraqi Freedom on March 19, 2003.

II. THE IMPACT OF OPERATION ENDURING FREEDOM AND OPERATION IRAQI FREEDOM ON US SERVICE MEMBERS' DEPLOYMENT

When the country is in danger, the military's mission is to wreak destruction upon the enemy... people sleep peacefully in their beds at night only because rough men stand ready to do violence on their behalf.

Id.; see also Operation Enduring Freedom Fast Facts, supra note 10.

¹³ U.S. War in Afghanistan, Council on Foreign Relations, http://www.cfr.org/afghanistan/us-war-afghanistan/p20018.

Bush announces the launch of Operation Iraqi Freedom, History, http://www.history.com/this-day-in-history/bush-announces-the-launch-of-operation-iraqi-freedom.

¹⁵ Id

Operation Iraqi Freedom and Operation New Dawn Fast Facts, CNN Library, http://www.cnn.com/2013/10/30/world/meast/operation-iraqi-freedom-and-operation-new-dawn-fast-facts.

Bush announces the launch of Operation Iraqi Freedom, supra note 14.

¹⁸ *Id*.

-Richard Grenier, The Washington Post, January 20, 1953¹⁹

Operation Enduring Freedom surpassed the Vietnam War as the longest war in the history of the United States, lasting 180 months. Departion Iraqi Freedom is the third longest war in U.S. history at 105 months. How many U.S. service members have deployed to Iraq and Afghanistan? In an attempt to understand how many soldiers had served in Operation Iraqi Freedom and Operation Enduring Freedom, in October 2008, the Vice Chief of Staff of the U.S. Army asked the RAND Arroyo Center to assess the demands placed on the Army by the continuing deployment of soldiers to operations in Iraq and Afghanistan. Following the initial analysis of these issues using December 2008 data, the RAND Corporation subsequently published a document updating the original analysis using December 2011 data.

One way to measure the Army's contributions to Operation Iraqi Freedom – referred to as Operation New Dawn since September 2010 – and Operation Enduring Freedom in Afghanistan is by calculating the total number of troop-years deployed.²⁴ A troop-year is a metric used to measure cumulative deployment length.²⁵ One troop-year is the equivalent of one solider deploying for twelve months, two soldiers deploying for six months each, one soldier deploying for eight months and another soldier deploying for four months, or twelve soldiers deploying for one month each. As of December 2011, the Army had provided over 1.5 million troop-years to Operation Iraqi Freedom/Operation New Dawn and Operation Enduring Freedom,²⁶ a 50% increase since the original RAND report in 2008. This number both Army-active component includes the and reserve component soldiers who have served in Operation Iraqi Freedom/Operation New Dawn and/or Operation Enduring Freedom at any time since the beginning of these conflicts.²⁸ Excluding reserves, the

Quote Investigator, http://quoteinvestigator.com/2011/11/07/rough-men.

Adam Taylor, *These are America's 9 longest foreign wars*, The Washington Post, May 29, 2014, http://www.washingtonpost.com/blogs/worldviews/wp/2014/05/29/these-are-americas-9-longest-foreign-wars.

 $^{^{21}}$ Id

Timothy M. Bonds, Dave Baiocchi, Laurie L. McDonald, *Army Deployments to OIF and OEF* at ix, RAND Arroyo Center (2010).

Dave Baiocchi, Measuring Army Deployments to Iraq and Afghanistan, RAND Corporation 2013 at 1.

²⁴ Id. at 3.

²⁵ *Id*.

²⁶ Id.

Army Deployments to OIF and OEF at xiii.

Measuring Army Deployments to Iraq and Afghanistan at 3.

Army-active component has contributed nearly 1.1 million troop-years to these two operations.²⁹

The Army has provided, by far, the largest portion of troop-years in support of Operation Iraqi Freedom/Operation New Dawn and Operation Enduring Freedom, relative to the other U.S. military services. 30 At 1.08 million troop-years, U.S. Army active component soldiers have provided 54% of the cumulative troop-years deployed to Iraq Afghanistan, 31 even though the Army represents only 40% of the total U.S. active component force. 32 This represents a slight increase from December 2008, when 52% of all active component deployments were Army soldiers.³³ The U.S. Navy, at 333,000 troop-years, has provided 17% of deployments.³⁴ Next is the U.S. Air Force providing 15% of deployments with 309,000 troop-years.³⁵ Finally, the U.S. Marine Corps, deployed for 208,000 troop-years, representing 15% of deployments.³⁶ The Army's reserve component deployments are also much higher than those of the other services.³⁷ Although not particularly surprising, as Operation Iraqi Freedom/Operation New Dawn and Operation Enduring Freedom have been predominantly ground wars, the results of these two reports highlight the demands placed on the U.S. Army and it's soldiers over the last decade and a half of war.

III. THE NATURE OF INJURIES SUSTAINED DURING COMBAT OPERATIONS IN AFGHANISTAN AND IRAQ

The tree of liberty must be refreshed from time to time with the blood of patriots & tyrants. It is it's natural manure.

-Thomas Jefferson, Paris, August 30, 1787³⁸

²⁹ Id.

³⁰ Id

³¹ *Id. at* 2.

³² Id at 3

³³ Army Deployments to OIF and OEF at xiii.

Measuring Army Deployments to Iraq and Afghanistan at 2.

³⁵ *Id*.

³⁶ *Id*.

³⁷ *Id. at 3.*

³⁸ *Jefferson Quotes & Family Letters*, The Jefferson Monticello, http://tjrs.monticello.org/letter/100.

Cumulatively, over the fifteen years since the invasion of Afghanistan, ³⁹ U.S. active component soldiers, marines, sailors, and airmen have spent over *two million troop-years* deployed. Unfortunately, operational tempo of this magnitude comes at a staggering price. According to recent data, including both U.S. military casualties and U.S. Department of Defense civilians, Operation Iraqi Freedom and Operation New Dawn have resulted in 32,244 wounded in action and 4,491 total deaths. ⁴⁰ Operation Enduring Freedom has resulted in 20,067 wounded in action and 2,355 killed in action. ⁴¹ Taken together, the wars in Afghanistan and Iraq have produced 52,311 U.S. service members wounded in action and 6,846 killed in action. ⁴²

The highest percentage of combat casualties to deployed service members occurred in Iraq and Afghanistan in 2007 and 2009, respectively. These casualty spikes are the result of increases in deployed service members to both theaters. The timeframe in Iraq coincided with the height of the U.S. counterinsurgency campaign and the associated troop surge increasing U.S. troop levels to more than 150,000. In 2009, troop levels in Afghanistan were increased in both February and December to bring the U.S. total to almost 100,000 deployed service members, in addition to 40,000 NATO troops, to conduct a comprehensive counterinsurgency campaign in response to the resurgence of the Taliban.

Numerous reports have been published on the epidemiology of combat wounds sustained in Iraq and Afghanistan.⁴⁷ However, these reports have focused on casualties seen and cared for at single medical

These are America's 9 longest foreign wars, supra note 20.

U.S. Department of Defense, http://www.defense.gov/news/casualty.pdf.

⁴¹ *Id*.

⁴² *Id*.

⁴³ Philip J. Belmont, Brendan J. McCriskin, Ryan N. Sieg, Robert Burks, Andrew J. Schoenfeld, *Combat Wounds in Iraq and Afghanistan from 2005 to 2009*, 73 J. TRAUMA ACUTE CARE SURG. 4, 10 (2012).

⁴⁴ Operation Iraqi Freedom and Operation New Dawn Fast Facts, CNN Library, http://www.cnn.com/2013/10/30/world/meast/operation-iraqi-freedom-and-operation-new-dawn-fast-facts.

Operation Enduring Freedom Fast Facts, supra note 10.

Combat Wounds in Iraq and Afghanistan from 2005 to 2009, supra note 43.

See Alec C. Beekley, David M. Watts, Combat Trauma Experience with the United States Army 102nd Forward Surgical Team in Afghanistan, 187 Am. J. Surg. 652 (2004); see also John M. Cho et al, Operation Iraqi Freedom: Surgical Experience of the 212th Mobile Army Surgical Hospital, 170 MIL. MED. 268 (2005); see also Tarak H. Patel et al, A U.S. Army Forward Surgical Team's Experience in Operation Iraqi Freedom, 57 J. Trauma 201 (2004); see also George E. Peoples, Tad Gerlinger, Robert Craig, Brian Burlingame, Combat Casualties in Afghanistan Cared for by a Single Forward Surgical Team during the Initial Phases of Operation Enduring Freedom, 170 MIL. MED. 462 (2005).

units, despite the U.S. military utilizing what is, essentially, a worldwide trauma system. A report from the U.S. Army Institute of Surgical Research, on the other hand, analyzed a centralized casualty database to describe the distribution of wounds and mechanisms of injury sustained during the wars in Iraq and Afghanistan. ⁴⁸ A total of 3,102 casualties were identified in Operation Iraqi Freedom and Operation Enduring Freedom between October 2001 and January 2005. 49 Of these, 977 combatants sustained 3,295 wounds - 3.4 wounds per casualty classified as non-battle injury and 559 combatants were treated for wounds and returned to duty within 72 hours. 50 These two cohorts of patients were excluded from further analysis. The remaining 1,566 combatants sustained 6,609 combat wounds – 4.2 wounds per casualty – as the direct result of hostile enemy action. 51 97% of the combatants were male, and the average age was twenty-six years old. 52 The majority of wounded personnel were Army (1,189), followed by Marines (326), Navy (38), and then Air Force (13).⁵³

Of the 6,609 wounds, 1,949 (29.4%) were in the head and neck region, 376 (5.6%) were in the thorax region, 709 (10.7%) were in the abdomen, and 3,575 (54.1%) were extremity wounds.⁵⁴ This analysis shows a significant increase in the head and neck region and a significant decrease in thoracic wounds compared with previous wars.⁵⁵ The mechanism of injury was also analyzed in this report. The majority of wounded combatants, 1,146 (79%), were injured by explosion, which included injury due to improvised explosive device (IED), landmine, mortar, bomb, or grenade.⁵⁶ Gunshot wounds resulted in 270 (19%) casualties, and 36 (2%) casualties were the result of motor vehicle crash.⁵⁷ This data represents the highest proportion of injury due to explosive mechanism and the lowest proportion of wounds from ballistic trauma.⁵⁸

The previous report, and most others that examined the nature of wounds sustained in Operation Iraqi Freedom and Operation Enduring Freedom, include all personnel in the zone of operations, regardless of

⁴⁸ Brett D. Owens et al, *Combat Wounds in Operation Iraqi Freedom and Operation Enduring Freedom*, 64 J. TRAUMA 295 (2008).

⁴⁹ *Id.* at 296.

⁵⁰ *Id*.

⁵¹ *Id*.

⁵² *Id*.

⁵³ L

⁵⁴ Combat Wounds in Operation Iraqi Freedom and Operation Enduring Freedom.

⁵⁵ Id

⁵⁶ *Id.* at 297.

⁵⁷ *Id*.

⁵⁸ *Id*.

military operational specialty or assigned duties. A recent review, however, intended to document the nature and extent of injuries sustained by soldiers in the U.S. Army with a single, combat specific, military specialty – the cavalry scout. ⁵⁹ This study was conducted using a combined dataset derived from the records of the Department of Defense Trauma Registry (DoDTR) and the Armed Forced Medical Examiner System (AFMES). ⁶⁰ A total of 701 cavalry scout casualties with 3,189 distinct injuries (an average of 4.6 injuries per soldier) and an average age of 25.9 years were identified in the search of the two databases. ⁶¹ Nearly 90% of the casualties were derived from the Iraq theater of operations and occurred during combat; 35% of the cohort was composed of individuals who died in theater (including those killed in action and those who died of wounds). ⁶²

Similar to the previously cited study, ⁶³ explosion was the most common mechanism of injury, resulting in 70% of all cavalry scout casualties. ⁶⁴ Gunshot wounds occurred in 18% of casualties and "other" mechanisms were responsible for 12% of injuries. ⁶⁵ Extremity wounds represented 34% (430 casualties) of the casualty burden by body region, followed very closely by head and neck injuries at 428 casualties. ⁶⁶ Injuries to the abdomen were 17% (214 casualties) of casualty load, while 16% (206 casualties) consisted of thoracic wounds. ⁶⁷

Despite the increased savagery of weapons employed on the modern battlefield, particularly the use of the improvised explosive device, the "died of wounds" rate – the rate in which the wounded arrive to a treatment facility alive but do not survive – at U.S. deployed surgical facilities compares favorably with previous wars. 68 Considering the prevalence of explosion as a mechanism of injury, the rate at which

⁵⁹ Andrew J. Schoenfeld, John C. Dunn, Julia O. Bader, Philip J. Belmont, *The Nature and Extent of War Injuries Sustained by Combat Specialty Personnel Killed and Wounded in Afghanistan and Iraq, 2003-2011*, 75 J. TRAUMA ACUTE CARE SURG. 287, 288 (2013).

⁶⁰ *Id*.

⁶¹ *Id*.

⁶² I.d

⁶³ Combat Wounds in Operation Iraqi Freedom and Operation Enduring Freedom at 297.

⁶⁴ The Nature and Extent of War Injuries Sustained by Combat Specialty Personnel Killed and Wounded in Afghanistan and Iraq at 288.

os Id.

⁶⁶ Id. at 288-289.

⁶⁷ *Id. at 289.*

⁶⁸ Shawn C. Nessen, Daniel R. Cronk, Jason Edens, Brian J. Eastridge, Todd R. Little, Jason Windsor, Lorne H. Blackbourne, John B. Holcomb, *US Army Two-Surgeon Teams Operating in Remote Afghanistan – An Evaluation of Split-Based Forward Surgical Team Operations*, 66 J. Trauma S37, S40 (2009).

extremity injuries occur, and the medical treatment provided to combatants, there has been an increased number of surviving service members with amputated limbs.⁶⁹ A review of the Military Amputation Database (MAD) to identify major extremity amputations from October 2001 through July 2011 revealed 1,221 amputees who sustained a total of 1,631 amputations. 70 Not surprisingly, 93% (1,136) of the amputees sustained their injury as the result of an explosion.⁷¹ The average amputation rate for the entire time period was 5.29 per 100,000 deployed troops with a concurrent average of 18.5 combat deaths per 100,000 deployed troops. 72 The most common (41.8%) level of amputation was transtibial – below the knee – and was followed closely (34.5%) by transfemoral – through the thigh. There were 366 (30%) multiple amputees and the most common multiple amputation pattern was 27% bilateral transfemoral – through the thigh in both legs. 74 Additionally, 218 service members (18%) sustained upper extremity amputations and eleven amputees (0.9%) had injuries that resulted in bilateral upper extremity amputations. 75

The Joint Theater Trauma System (JTTS) was established in 2004 under the U.S. Central Command to effect trauma care performance improvement on the battlefield to provide a near-real-time registry of combat related casualties. 76 The JTTS noted a large increase in multilimb loss casualties in the Afghanistan theater of operations in the latter half of 2010.⁷⁷ IED explosions targeting dismounted soldiers – those patrolling on foot - caused a large portion of these injuries⁷⁸ and particularly gruesome pattern of injuries subsequently emerged. Compared to a baseline incidence of 4.7%, the genitourinary injury incidence among U.S. casualties at Landstuhl Regional Medical Center was 19% in October 2010, 10% in November 2010, and 13% in December 2010.⁷⁹ What came to be known as dismounted complex battle

Chad A. Krueger, Joseph C. Wenke, James R. Ficke, Ten Years at War: Comprehensive Analysis of Amputation Trends, 73 J. Trauma Acute Care Surg. S438 (2012).

Id. at S440.

⁷¹ Id.

⁷² Id.

⁷³ Id.

⁷⁴ Id. at S441.

⁷⁵ US Army Two-Surgeon Teams.

James R. Ficke et al, Dismounted Complex Blast Injury Report of the Army Dismounted Complex Blast Injury Task Force, 73 J. Trauma Acute Care Surg. S520 (2012).

Id.

⁷⁸ Id.

Id.

injury results in amputation of at least one lower extremity at the knee or above, with either amputation or severe injury to the opposite lower limb, combined with pelvic, abdominal, or urogenital injury. ⁸⁰

As noted previously, ⁸¹ blast is overwhelmingly the most common mechanism of injury in both Operation Iraqi Freedom and Operation Enduring Freedom. Of all the soldiers evacuated from Iraq and Afghanistan to Walter Reed Army Medical Center who sustained battle injury, 28% suffered a traumatic brain injury (TBI). ⁸² Nineteen percent of these patients suffered concomitant amputation, with lower extremity amputation being the most common. ⁸³ Penetrating brain injury was seen in 12% of the total group, the remainder being closed brain injury. ⁸⁴ Fifty-six percent of these patients suffered a moderate or severe TBI and the remaining 44% displayed mild TBI. ⁸⁵

IV. CONCLUSION

"[T]he soldier above all other people prays for peace, for he must suffer and bear the deepest wounds and scars of war. But always in our ears ring the ominous words of Plato . . . 'Only the dead have seen the end of war.'"

-General Douglas MacArthur, Farwell Speech, USMA at West Point, May 12, 1962⁸⁶

Ever since the first skirmishes between British forces and colonial militiamen took place at Lexington and Concord in April 1775, ⁸⁷ U.S. service members, soldiers, marines, airmen, and sailors, have answered America's call to arms, never failing and never faltering. The most recent

⁸⁰ *Id*.

⁸¹ Combat Wounds in Operation Iraqi Freedom and Operation Enduring Freedom at 297; The Nature and Extent of War Injuries Sustained by Combat Specialty Personnel Killed and Wounded in Afghanistan and Iraq at 288.

⁸² Deborah Warden, *Military TBI During the Iraq and Afghanistan Wars*, 21 J. HEAD TRAUMA REHABIL. 398, 400 (2006).

⁸³ *Id*.

⁸⁴ Id.

⁸⁵ *Id*.

General Douglas MacArthur's Farewell Speech, The National Center for Public Policy Research, http://www.nationalcenter.org/MacArthurFarewell.html.

^{8/} American Revolution History, http://www.history.com/topics/american-revolution/american-revolution-history.

65

conflicts, Operation Enduring Freedom in Afghanistan and Operation Iragi Freedom in Irag are no exception. For the last fifteen years, U.S. service members have been at war, often against an amorphous and invisible enemy, employing weapons of ever-increasing savagery. As noted, in a report using statistics from 2011, U.S. service members spent two million troop-years deployed to Iraq and Afghanistan⁸⁸ – a number that continued to increase as the combat mission in Afghanistan continued through 2014. Nearly seven thousand⁸⁹ of these young men and women came home draped in the flag they gave their lives defending. Over fifty-two thousand ocame home bearing the visible wounds of war. Perhaps up to nearly one-in-five returning service members may suffer from post-traumatic stress disorder⁹¹ and struggle with reliving the nightmare of war. Even those lucky enough to escape either physical or mental wounds, however, left something of themselves behind. As bipartisanship and political rhetoric continue to divide as often as unite, it is incumbent on us as a nation to never, ever forget those gallant few, from 1775 until today, that have been willing to bear such burden and pay such a terrible price so that we may live free. As President John F. Kennedy said so well, "A nation reveals itself not only by the men it produces but also by the men it honors, the men it remembers.",92



Measuring Army Deployments to Iraq and Afghanistan at 2-3.

U.S. Department of Defense, http://www.defense.gov/news/casualty.pdf.

⁹⁰ Id.

⁹¹ Brett T. Litz, William E. Schlenger, *PTSD in Service Members and New Veterans of the Iraq and Afghanistan Wars: A Bibliography and Critique*, 20 PTSD RESEARCH QUARTERLY (2009).

⁹² John F. Kennedy, Quotable Quotes, http://www.goodreads.com/quotes/389509-a-nation-reveals-itself-not-only-by-the-men-it.