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AN OCCUPATIONAL THERAPY VETERAN RESOURCE GUIDE

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Master's of Occupational Therapy

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This Scholarly Project Paper, submitted by Paige Thiele and Miranda Vastag in partial fulfillment of the requirement for the Degree of Master's of Occupational Therapy from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

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Faculty Advisor

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Date

PERMISSION

Title: An Occupational Therapy Veteran Resource Guide

Department: Occupational Therapy

Degree: Master's of Occupational Therapy

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Abstract

Currently, there are limited resources available to occupational therapists working with the veteran population. The Department of Veterans Affairs (VA) is often confusing and complex for many health care workers to understand. An extensive literature review was conducted and the research indicated there is a need for an occupational therapy resource guide which includes a working knowledge of military culture, The Department of Veterans Affairs eligibility requirements and access, military priority conditions as well as military specific assessments. Therefore, the purpose of this project is to develop a guide that allows occupational therapists working with the veteran population to gain foundational knowledge on the military culture, information regarding VA access and eligibility, military priority medical conditions as well as military specific assessments.

The product developed consists of four sections including: military culture, VA access and eligibility, military medical priority conditions and military specific assessments. The product is designed to be a guide for occupational therapists to advocate for the veteran population, educate occupational therapists as well as other health care professionals on military priority medical conditions and military specific assessments to utilize in various facilities. The guide can be used to consult with other health care professionals in regards to gaining access and receiving services through the VA.

CHAPTER 1

INTRODUCTION

Currently, there is no singular resource guide available to assist newly graduated occupational therapists, as well as experienced occupational therapists, working outside the Department of Veterans Affairs for working with the veteran population. While the majority of the veteran population receives services at the Department of Veterans Affairs, an unexpected 25-40% of veterans receive additional or sole services by the private sector (Borowsky & Cowper, 1999; Shen, Hendricks, Zhang & Kazis, 2003). With close to 25 million veterans and up to 40% receiving some sort of care from the private sector, it is essential that civilian healthcare workers have a working knowledge of the unique military culture, general eligibility requirements and types of programs available within the Department of Veterans Affairs, as well as specific military diagnoses. For occupational therapists working with the veteran population, these types of resources are not readily available.

The research indicates that there is a need for an occupational therapy resource guide which includes a working knowledge of military culture, The Department of Veterans Affairs eligibility requirements and access, as well as specific military diagnoses in order to provide client-centered care. An ideal resource guide would provide information regarding new and effective intervention strategies, assessments and ways to utilize therapeutic use of self with the aim of building rapport with the veteran population. New interventions will not be proposed in the resource guide; however, the

guide will assist occupational therapists working in the private health care sector to have a basic understanding of the military specific interventions and assessments associated with various diagnoses within the veteran population.

The product was developed using The Occupational Therapy Practice Framework: Domain and Process 2nd Edition [OTPF] (AOTA, 2008) as a guide. The OTPF was utilized in place of an occupational therapy model or frame of reference as the framework provides a structure for occupational therapists to use a broad spectrum of occupational therapy interventions with particular attention to the advocacy, education and consultation roles.

Advocacy, education and consultation for the person and population were the primary focus for this product. While areas of occupation are most often addressed in the clinical setting, a working knowledge of the military culture is essential to provide client-centered care and evidenced-based practice. Advocacy, education and consultation are key roles for the occupational therapist, particularly given the lack of resources currently available on the military culture. This resource guide provides knowledge on military culture, access and eligibility to military healthcare systems and military specific diagnoses which will assist the therapist in the advocacy, education and consultation roles.

There are numerous military specific terms introduced throughout the literature review and product. Definitions will be provided and terminology explained in detail as it relates to the veterans as well as occupational therapists. The final overall goal of the resource guide is to provide occupational therapists working in the private sector to have

a working knowledge of the military culture, The Department of Veterans Affairs eligibility and access, as well as specific military diagnoses.

The following chapters include a thorough review of literature providing evidence to support the occupational therapy veteran resource guide, a detailed description of the methodology used to design the product, an overview of the product and a summary of the results as well as appendices. The appendices will include a copy of the resource guide and references.

CHAPTER II

REVIEW OF LITERATURE

Understanding the Military

The United States defense system is a complex entity, whose primary duty is to protect the people of America in time of need. Understanding the military may be difficult, especially to those outside of the military. Military personnel form a unique division of society as they are governed by their own distinct set of values, norms, laws and traditions (Coll, Weiss, & Yarvis, 2011). Military families relocate often, which creates more isolation between extended family members and the civilian world (Hall, 2011). This isolation aids in creating a culture that is unfamiliar and unique in the eyes of civilian healthcare workers (Hall, 2011). Due to the unique culture that enforces camaraderie; military personnel may find themselves to be "inherently anti-civilian." (Coll et al., 2011 p. 491).

The military itself is a unique culture with its own language, norms of behavior, procedures and beliefs (Reger, Etherage, Reger, Gahm, 2008). Most civilian healthcare workers have limited knowledge regarding military culture. As a healthcare provider working with any culture, it is critical to recognize and understand the culture prior to providing treatment (Hall, 2011; Reger et al., 2008). While a majority of the veteran population receives services at the Veterans Health Administration, an unexpected 25-40% of veterans receive additional or sole services by the private sector (Borowsky & Cowper, 1999; Shen et al., 2003). With close to 25 million veterans and up to 40%

receiving some sort of care from the private sector, it is essential that civilian healthcare workers become familiar with the unique military culture including: the branches of services, its components and culture, military values, and clinical implications that can arise from war experiences (Halvorson, 2010; Reger et al, 2008).

Branches of Service

Within the United States military there are five branches of services (Halvorson, 2010). The five branches include: Army, Navy, Marine Corp, Air Force and Coast Guard (Halvorson, 2010). All five branches are under three primary military departments: the Department of the Army, the Department of the Navy and the Department of the Air Force (Halvorson, 2010). Each of the five branches has its own order of military ranks and chain of command. These ranks are divided into three categories: enlisted, officer and warrant officer (Halvorson, 2010). Examples of enlisted ranks include: petty officer, private, corporal etc. Some examples of an officer rank includes: lieutenants, captain, majors and colonels (Halvorson, 2010). For further information on military culture and a complete list of enlisted and officer ranks see Appendix A: An Occupational Therapy Veteran Resource Guide Section 1. Within each of the five branches, there are two components, discussed below.

Components

There are components within each branch of service; the active component and the reserve component (Halvorson, 2010). The active component includes full-time service members. Full-time service members are individuals that are required to wear their uniform every day and often live on or near a base (Halvorson, 2010). This type of living situation can allow some service members to never interact with those outside of

the base; which is often why military families are drawn to other military families (Halvorson, 2010). While the active component is full-time service members, ready to go at a moment's notice, the reserve component is not as demanding on time and the military members living situations.

The reserve component is comprised of two organizations, the Reserves and the National Guard (Halvorson, 2010). The Reserves and National Guard serve part-time in the military, often one weekend a month and two weeks a year (Halvorson, 2010). This reserve component can be mobilized to serve full-time to protect the nation in time of need, such as war or a natural disaster. The Reserves are controlled by the President of the United States and their purpose is providing, "trained and qualified people for active duty" during a time of war, natural disaster, or to fill positions when more units are needed (Halvorson, 2010, p. 3). However, the National Guard has more than one purpose. The National Guard is also responsible for federal and state missions. The primary goal of the National Guard is to support the state in time of need (Halvorson, 2010). While the branches are divided into two components, active and reserve, the values and culture of the military can be seen throughout each service branch.

Military Values

Understanding the values of the military is important in understanding its serving members. These core values are instilled in each service member and become an important aspect of each one's life. Overall, the two core values of the United States military are honor and integrity (Halvorson, 2010). These values can be seen across all five branches; however, within in each branch there are differences in other values. Army values include: duty, loyalty, respect, selfless service and personal courage

(Halvorson, 2010). The Navy and Marine Corp value courage and commitment in addition to the two core values (Halvorson, 2010). The Air Force values include service before self and excellence in what we do (Halvorson, 2010). Finally, the Coast Guard values include respect and devotion to duty (Halvorson, 2010). These values are demonstrated by service members in their respective branches and play a major role in personal beliefs and actions outside of the service. During service, service men and women are often expected to stay focused, maintain discipline and control their emotions. These high demands may have a serious impact on their personal life and health.

Clinical Implications

With a significant amount of the veteran population, 25-40% of veterans, receiving services from the private sector, it is essential that occupational therapists as well as other healthcare professionals have a working knowledge of military culture (Borowsky & Cowper, 1999; Shen et al., 2003). A working knowledge of the military culture will assist occupational therapists in building rapport to provide client-centered and evidenced-based care. Having an understanding of a veteran's prior rank, requirements and cultural norms will allow occupational therapists to guide the intervention process as the military culture will impact the client's attitude, beliefs and work ethic in a healthcare setting.

The Department of Veterans Affairs

Brief History

The United States Department of Veterans Affairs is a highly recognized system around the world and is complex in how it operates. The primary goal of the United States Department of Veterans Affairs is to provide federal benefits to veterans (United

States Department of Veterans Affairs, 2009). Dating as far back as the establishment of the English colonies, Americans have been providing pension benefits for disabled veterans (United States Department of Veterans Affairs, 2006, 2012a). After the civil war, the number of disabled veterans rose close to two million and pressed the need to provide medical services to veterans (United States Department of Veterans Affairs, 2006). The Navel Home was the first national effort to provide medical services to veterans, which was established in Philadelphia in 1812; followed by two other locations in Washington D.C., known as the Soldiers' Home in 1853 and Elizabeth Hospital in 1855 (United States Department of Veterans Affairs, 2006).

When World War I began, the United States created a new system for veterans' benefits to include: compensation, insurance for active duty service members as well as veterans, and vocational rehabilitation (United States Department of Veterans Affairs, 2006, 2012a). These veteran services were carried out by three different Federal agencies: the Veterans Bureau, the Bureau of Pensions of the Interior Department and the National Home for Disabled Volunteer Soldiers (United States Department of Veterans Affairs, 2012a). Shortly after, the government established the Veterans Administration in the 1930's, greatly expanding its reach to millions of veterans across America (United States Department of Veterans Affairs, 2006, 2012a).

Since its establishment in the 1930's, the Veterans Administration has continued to expand greatly, reaching millions of veterans across America. The new Veterans Administration system is comprised of three operating units which provide numerous benefits to service members. The operating units include the Veterans Health

Administration, Veterans Benefits Administration and the National Cemetery Administration (United States Department of Veterans Affairs, 2006, 2012a).

Three Operating Units

The three operating systems; the Veterans Health Administration, Veterans Benefits Administration and the National Cemetery Administration work together closely in order to provide a multitude of services to veterans. For the purpose of this resource guide, we are only focusing on the Veterans Health Administration. For many civilian healthcare workers, the terms Department of Veterans Affairs (VA) and the Veteran Health Administration (VHA) are used interchangeably. For the purpose of this literature review and The Occupational Therapy Veteran Resource guide, the Department of Veterans Affairs (VA) will be used solely.

Currently, there are over 153 medical centers, 919 ambulatory care and community-based outpatient clinics, 135 nursing homes, 230 veteran centers, 47 domiciliary residential rehabilitation homes and 137 homecare programs (United States Department of Veterans Affairs, 2009; Vandenberg, Bergofsky & Burris, 2010). The VA offers services in every state as well as the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Philippines (Vandenberg et al., 2010).

The VA is continually working on setting the benchmark of excellence in the medical field, while focusing on prevention, promoting well-being through education, research and services during national emergencies (United States Department of Veterans Affairs, 2012a). It is the mission of the VA to provide veterans with exceptional health care that can improve health, preserve health or restore one's health (United States

Department of Veterans Affairs, 2012a, 2012b). In order to provide veterans with this exceptional, state-of-the-art service, the VA provides numerous services to veterans.

Benefits of the VA system

The benefits veterans receive from the VA system are immense. The VA system provides the full range of medical services to veterans all across America including: primary care, health promotion, disease prevention, surgery, palliative care, critical care, women's and men's mental health, orthopedics, rehabilitative therapies and many more (United States Department of Veterans Affairs, 2012b). These services can be accessed in over 1,400 locations across the nation (United States Department of Veterans Affairs, 2009). With the immense amount of services provided by the VA, it is a wonder why veterans choose to use facilities other than the VA as their primary health care system. Eligibility requirements and perceptions of the VA health services provided to veterans can often influence the use of the VA system.

Veteran Eligibility and Knowledge of the VA

Eligibility requirements, perceptions of how the VA system works, and the benefits provided to veterans can often be confusing to veterans as well as civilian healthcare providers. Understanding the eligibility requirements is important for civilian healthcare providers as well as VA healthcare providers in order to determine which services are offered to specific service members which, in turn, allows providers to give the best care possible (United States Department of Veterans Affairs, 2012b).

In order to receive any VA services, most veterans must be enrolled; however there are exceptions with certain cases (United States Department of Veterans Affairs, 2012b). Anyone who has served in the active military, naval or air force may be eligible

to receive VA services. Once enrolled in the VA, veterans are assigned to one of seven priority groups. Priority group one receives the highest priority of care; while group seven receives the lowest priority for care (United States Department of Veterans Affairs, 2012b). Information regarding the enrollment priority groups can be found in Appendix A: An Occupational Therapy Veteran Resource Guide Section II. Although service members may be eligible for VA services, there are several barriers that may lead to the use of a civilian healthcare system.

Barriers to VA Services

While the VA is the largest healthcare system in the United States and sets the benchmark for excellence in healthcare, there are several barriers for veterans to receive VA services. These barriers contribute to the 25-40% of veterans who acquire additional or sole care from a private sector healthcare provider (Borowsky & Cowper, 1999; Shen et al., 2003). Barriers to receiving services through the VA system include: lack of information or knowledge regarding eligibility and services, limited access, and veteran's perceptions with regard to the VA system.

One factor contributing to the decreased use of the VA system is the lack of information regarding eligibility requirements and services, or benefits provided by the VA system (Arredondo, Foote, Pruden, McFarland M., & McFarland L., 2010; Damon-Rodriguez et al., 2004; Wakefield, Tripp-Reimer, Rosenbaum & Rosenthal, 2007). Arredondo et al. (2010) noted the primary source of information regarding VA eligibility requirements and services was from fellow veterans rather than the VA. Arredondo et al. (2010) also found that the VA does not always provide veterans with all the information regarding services, unless requested by veterans.

Damron-Rodriguez et al. (2004) found strong agreement among the veteran population that there was an apparent lack of information regarding VA services. Not only do veterans need to become aware of information regarding VA services, they need to understand it, in other words, be health literate. Weld, Padden, Ricciardi and Bibb (2009) describe health literacy as the degree in which individuals have, "the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions," (p. 1138). Even once information is obtained regarding eligibility requirements and services provided, access may still be a barrier to receiving such services.

Access to a VA facility is highly noted as a barrier to receiving VA services (Burgess & DeFiore, 1994; Mooney, Zwanziger, Phibbs & Schmitt, 2000; Wakefield et al., 2007). Wakefield, Tripp-Reimer, Rosenbaum and Rosenthal (2007) found veterans repeatedly voiced concern regarding the distance required to travel to receive care at a VA facility. Acquiring transportation and the distance to the VA facility was found to be an enabling factor to VA use (Wakefield et al., 2007). Mooney, Zwanziger, Phibbs and Schmitt (2000) similarly found that there is a correlation between distance and use of the VA system. Mooney et al. (2000) found a decrease in VA use with an increase in distance required to access care. Both Mooney et al., (2000) and Wakefield et al., (2007) found no difference among the elderly veteran population compared to the younger generation of veterans when accounting for distance as a barrier. The results indicated that no matter what age population, an increase in distance correlates with a decrease in VA services accessed (Mooney et al., 2000; Wakefield et al., 2007). In contrast, Burgess and DeFiore (1994) identified distance as being a barrier only in the elderly, age 65 or

older, veteran population. Overall, distance can be a barrier to the use of VA services among the veteran population and impact the use of private sector healthcare providers. In addition to knowledge regarding eligibility requirements, services provided, and access to a VA system; veterans' perspectives of the VA may also impact use of care.

Veterans' perspectives on the VA determine whether or not the VA is utilized solely, in addition to private sector healthcare provider, or not at all. Many veterans view transitioning into the VA system as exhausting and confusing (Arredondo et al. 2010). One frustration associated with transitioning to the VA is often the loss of medical records (Arredondo et al., 2010). Another frustration veterans have noted with the VA system is the fact that it is a teaching hospital and the turnover rate is high, which makes seeing the same provider twice extremely difficult (Hobbs, 2008). As one veteran stated, "I hated the 'cocktail party' atmosphere as students made their way from one room to the next to see what conditions they could glimpse…" (Hobbs, 2008, p. 339). The same veteran previously quoted stated that he rarely saw the same provider twice, which, in addition to the loss of medical records barrier, caused him to stop accessing the VA (Hobbs, 2008). Additionally, once transitioned into the VA, veterans have often reported a lack of support and a negative stigma associated with VA use (Arredondo et al., 2010). Not only does transitioning into the VA system have a negative stigma surrounding it, but the VA as a whole is considered to have a stigma (Damron-Rodriquez et al., 2004).

Veterans' often view the VA has having a 'welfare' stigma associated with use of VA services (Damron-Rodriquez et al., 2004). The VA has a reputation of providing 'charity' to the veteran population and most veterans feel too proud to receive such services categorized as charity (Damron-Rodriquez et al., 2004). Another perspective is

that elderly veterans feel as though if they are eligible for Medicare they should not be using the VA services, instead the VA services so be for those who are of less fortune or without medical assistance (Damron-Rodriquez et al., 2004). Shen et al. (2003) also noted that veterans enrolled in the VA who also have private insure are more likely to obtain medical services from a private sector healthcare provider than the VA.

Additionally, a stigma associated with mental health plays a significant role in VA utilization (Vogt, 2011). The culture of the military places great value on emotional strength, which has been shown to cause veterans to have negative beliefs about treatment for mental illness as well as mental illness in general.

Another factor that plays into mental health treatment in the VA is the access to health records. As commanding officers have access to each service member's mental health records, veterans are often reluctant to seek out treatment for mental illness. It has been found that veterans' are fearful that their mental health records would be accessible to not only commanding officers, but potential employers at the state and federal level (Vogt, 2011).

Finally, while a number of veterans do not use the VA based on its stigma, several veterans chose not to use the VA based on their perspective of quality of care provided. According to Damron-Rodriquez et al. (2004) veterans feel as though the quality of care provided in VA facilities at times may not be as high as care received when using a private sector healthcare facility. While veterans had both positive and negative perspectives on the quality of care provided by the VA, the negative perspectives appear to play a larger role in discontinuing or not solely using VA services (Damron-Rodriquez et al., 2004). In addition, Borowsky and Cowper (1999) found that a perception of lower

quality of care provided by the VA may lead veterans to rely on both the VA and private sector healthcare facilities. Borowsky and Cowper (1999) also found that for veterans who received care from both the VA and a private sector healthcare provider, the private sector healthcare provider accounted for approximately half of primary care visits. Similarly, Shen et al. (2003) found that 42.6% of veterans use both VA and private sector healthcare facilities. With a large percentage of the veteran population obtaining services from a private sector healthcare provider, it is crucial that there be an increase in communication and understanding between the VA and the private sector healthcare facilities and their employees.

Role of Occupational Therapists Working With Veterans

For the purpose of this literature review and product, the Occupational Therapy Practice Framework: Domain and Process 2nd Edition [OTPF] (AOTA, 2008), was utilized due to its support of a broad spectrum of occupational therapy interventions with particular attention to the advocacy, education and consultation roles.

Advocacy, education and consultation for the person and population were the primary focus of the product. While areas of occupation are the focus of care provided in the clinical setting, one must first have a working knowledge of the military culture in order to provide client-centered care and evidenced-based interventions. Advocacy, education and consultation are key roles that require the development of resources on the military culture, which can then enable occupational therapists to provide treatment to the veteran population. By providing knowledge on the military culture, VA eligibility and access and military specific diagnoses, the resource guide provides the occupational therapist with tools to strengthen the advocacy, education and consultation roles.

To advocate, educate and consult with other occupational therapists or interdisciplinary teams members, occupational therapist must focus on key diagnoses within the veteran population. According to the American Occupational Therapy Association (2007), the primary diagnoses for occupational therapy to address within the veteran population include: traumatic brain injury (TBI), spinal cord injury (SCI), post-traumatic stress disorder (PTSD) and burns, wounds and amputations.

Traumatic Brain Injury

The occupational therapy role in working with Traumatic Brain Injury (TBI) within the VA includes assisting veterans with resuming daily activities such as dressing and eating, recommending adaptive equipment personalized to the individual and providing compensatory techniques for problems such as memory impairment. In the military, the majority of TBIs are blast related (Betthauser, Bahraini, Krengel, & Brenner, 2012). The authors state that there are three levels of mild TBI that veterans can suffer; primary, secondary and tertiary. The primary type of mild TBI is caused by barotrauma. Barotrauma causes physical damage by high air pressure expansion secondary to the explosion. The secondary type of mild TBI is caused by objects that are thrown off of explosives. The third type of mild TBI is caused by bodily displacement (Betthauser et al., 2012). It is important to note that some veterans with a mild TBI report having post-concussive syndrome (PCS), which includes symptoms that are persistent and disabling, such as psychiatric, somatic and cognitive, among others (Betthauser et al., 2012). The VA is currently using a few tools to screen for mild TBI and PCS symptoms. For further information regarding VA TBI assessments see Appendix A: An Occupational Therapy Veteran Resource Guide.

Post-traumatic Stress Disorder

Within the VA hospital structure, occupational therapists are also likely to provide services to individuals with Post-traumatic Stress Disorder (PTSD). PTSD is characterized by three distinct symptoms: re-experiencing of the traumatic event, avoidance of trauma-related stimuli and emotional numbing, and persistent hyperarousal (Betthauser et al., 2012; Garske, 2011). Military personnel are at risk for exposure to specific traumas that most civilians are not. According to Garske (2011) there are many causes of combat-related PTSD. Combat-Related PTSD causes include:

> "Feeling helpless to alter the course of potentially lethal events; being exposed to severe combat in which buddies were killed or injured; having personally killed enemy combatants and possibly, innocent bystanders; being exposed to uncontrollable and unpredictable life-threatening attacks such as ambushes or roadside bombs; experiencing post combat exposure to the consequences of combat, such as observing or handling the remains of civilians, enemy soldiers, or U.S. and allies personnel; being exposed to the sights, sounds and smells of dying men and women; and observing refugees, devastated communities and homes being destroyed by combat" (Garske, 2011, p. 32).

In addition, Garske (2011) and Brewin, Andrews, Hejdenberg and Stewart (2012) identified three different types of PTSD; acute, chronic and delayed onset. Acute PTSD symptoms last less than three months, chronic PTSD symptoms occur for at least three months or longer, and with delayed onset PTSD the onset of symptoms occurs at least six months after the traumatic event (Brewin et al., 2012; Garske, 2011). Occupational

therapists can educate veterans on using relaxation techniques, desensitization, and coping skills to aid veterans suffering from PTSD. A common approach with veterans suffering from PTSD is Cognitive Behavioral Therapy (CBT). CBT focuses on cognitive restructuring, exposure therapy and systematic desensitization (Garske, 2001; Mendes, Mello, Ventura, Passarela, & Mari, 2008). Other therapies used to treat veterans with PTSD include social skills training, relaxation techniques, psychodynamic psychotherapy and eye movement desensitization and reprocessing (EMDR), (Garske, 2011; Mendes et al., 2008). Occupational therapists also offer support and work with the veterans and their families to prevent secondary diseases. The most frequent co-morbidities of PTSD are substance abuse, anxiety disorders and depression (AOTA, 2008; Mendes, et al., 2008). There are a number of screening tools and questionnaires used for veterans with PTSD. For a comprehensive list please see Appendix A: An Occupational Therapy Resource Guide.

Burns, Wounds & Amputations

Additionally, occupational therapists work with veterans who may have burns, wounds and amputations. For the purpose of this product, burns, wounds and amputations will be collectively termed ‘combat injuries’. While there has been an increased emphasis on addressing soldiers suffering from post-traumatic trauma disorder, spinal cord injuries, and traumatic brain injuries; wounds which result in severe burns and amputations still account for a significant amount of combat injuries. Combat injuries occur from a variety of causes including: environmental exposures, gunshots, grenades, improvised explosive devices, landmines, and suicide bombings (Taylor & Jeffery, 2009).

Occupational therapist should have a basic understanding of the severity and impact combat injuries can have on soldiers and veterans. There is a significant difference between severe revival of injured patients in the civilian world compared to the military settings (Champion, Bellamy, Roberts, Leppaniemi, 2003). Major differences include: high energy and high lethality of wounding agents, multiple causes of wounding, austere resource-constrained environment, delayed access to definitive care, predominance of penetrating injuries and persistence of threats in wartime settings (Champion et al., 2003). Additionally, most combat injuries result from fragments (62%); while blasts only account for three percent of combat injuries (Champion et al., 2003). Occupational therapists should be aware of the variety of causes that result in combat injuries, as well as primary site of injuries. This knowledge will assist the occupational therapists in identifying appropriate intervention strategies.

Occupational therapists assist in desensitization of the limbs, debridement of wounds and burns, and fitting and training with prosthetics and orthotics (American Occupational Therapy Association, 2007). According to Taylor and Jeffery (2009), managing wounds should be holistic in nature due to the fact that military wounds are often more complex. Furthermore, there are several methods used for wound management including: effective analgesia, addressing optimum nutritional status, microbiology swabs and debridement (Taylor & Jeffery, 2009). In addition, occupational therapists may also assist in range of motion exercises and participation in activities of daily living (ADL) in order to promote maximal independence (American Occupational Therapy Association, 2007).

Spinal Cord Injuries

Finally, occupational therapists may work with is Spinal Cord Injuries (SCI) within the veteran population. SCI is a primary diagnoses seen within the veteran population due to past and current world conflicts. According to Curtin et al., 2012, one in every five individuals within the United States with a SCI are veterans. While there is a significant number of SCI within the veteran population, the VA has designated military specific terminology when addresses SCI; however, there are differences when addressing SCI within the veteran population due to the significant difference of comorbidities associated with SCI within the veteran population.

Currently, the majority of veterans with SCI are between 45-64 years of age (Curtin et al., 2012). Of veterans diagnosed with a SCI, the average number of comorbid conditions is approximately 15 (Curtin et al., 2012). Of the comorbid diseases often associated with SCI within the veteran population, the most common include: pressure ulcers, obesity, Methicillin-Resistant Staphylococcus Aureus (MRSA), influenza and cross-cutting. In addition, the majority of the veteran SCI population is white (61%) and more than 50% of veterans had paraplegia (Curtin et al., 2012).

Occupational therapists assist veterans with SCI to remain as independent as possible by training veterans to use adaptive equipment and assistive devices, fitting veterans with wheelchairs, and maintaining and improving strength and range of motion. In addition, occupational therapists have the ability to assess home and community environments and make recommendations for modifications that allow for greater mobility and independence.

Conclusion

While the benefits of using the VA system may appear endless, several barriers detour veterans from using or receiving such benefits. The veteran population has identified several issues including: a clear lack of information regarding eligibility and types of services offered, lack of support, limited access to VA facilities, and a negative stigma surrounding the use of VA services. These barriers lead to a significant amount of veterans, 25-45%, enrolled in the VA using both the VA and private sector healthcare facilities, or rely solely on private sector healthcare facilities. Thus, it is imperative that civilian healthcare providers are knowledgeable on the veteran population and the VA system.

As an understanding of the VA and access to VA services can be limited to veterans as well as private sector healthcare workers who treat the veteran population, there is a clear need for a resource guide to assist occupational therapists when working with the veteran population. An ideal resource guide will focus on providing occupational therapists with a working knowledge regarding the military culture, VA eligibility and access, as well as information regarding effective intervention strategies and assessments for key populations in order to assist occupational therapists in building rapport to provide client-centered care. New interventions and assessments will not be developed; however, the guide will assist occupational therapist in identifying military specific interventions and assessments to provide evidenced-based practice for the various diagnoses within the veteran population.

CHAPTER III

METHODOLOGY

A comprehensive literature review was conducted to identify what resources are being utilized by occupational therapists to provide client-centered care for the veteran population. In order to provide a detailed review of literature, several databases were utilized in the search for information regarding the military culture, background of the VA, VA eligibility and access, as well as military specific diagnoses. Databases utilized in locating research include: Harley E. French, Pub Med, CINAHL as well as other medical facility websites. The VA database provided information regarding the history of the VA and VA eligibility and access. In addition, occupational therapy text books were used in gathering information to support this scholarly project.

Currently, there are no resource guides available for occupational therapists that address working with the veteran population; therefore, there is a clear need for an occupational therapy veteran resource guide to provide insight on the military culture, a working knowledge regarding VA eligibility and access as well as military specific diagnoses.

The literature suggests that the culture of the military differs from the culture of civilian life (Hall, 2008; Hall, 2012; Hobbs, 2008; & Reger et al., 2008). For this reason, the resource guide contains information about military values, the identity of military members, characteristics of the military culture, military specific language, and military rankings. Furthermore, the lack of access to military hospitals is cited in the

literature as a concern. Therefore, the resource guide contains information to facilitate therapists in building an understanding of military culture and the intricacies of gaining access to military hospitals.

CHAPTER IV

PRODUCT SUMMARY

The Occupational Therapy Veteran Resource Guide consists of four sections: the military culture, VA eligibility and access, military specific diagnoses and military specific assessments. With the use of this product, the therapist will gain a working knowledge which will allow for provision of client-centered care to the veteran population.

Section one, which addresses military culture, focuses on providing a knowledge base on military values and beliefs as well as habits, roles and routines. In order to consult, educate or advocate at the person or population level, one must have a working knowledge with regard to the military culture. Section two, which addresses veteran eligibility and access to the VA, focuses on providing the therapist with information and resources needed to understand how the VA system operates. With an understanding of the general eligibility requirements and types, and locations of specific programs available, the therapist will have the ability to consult with other therapists and interdisciplinary team members, as well as advocate or educate for full utilization of resources available to their client. Section three, which addresses four military specific diagnoses, provides an understanding of military definitions, injury etiology, military related terminology, as well as unique assessments and intervention strategies used within the VA. Section four address military specific assessments used with the veteran population. By gaining an understanding of the aforementioned items, the therapist can

advocate to integrate new assessments and intervention strategies into their facility. Once the therapists have a working knowledge of the assessments and intervention strategies commonly used within the VA, they will better be able to serve as a consultant to other occupational therapists as well as interdisciplinary team members.

This product was designed to be utilized by occupational therapists across a broad spectrum of contexts and throughout the various stages of patient care. It will provide a detailed understanding of the military culture, VA eligibility and access as well as military specific diagnoses. The overall goal of the Occupational Therapy Veteran Resource Guide is to give the therapist a working knowledge based of the unique military culture, a basic understanding of VA eligibility requirements and access, as well as military specific diagnoses including assessments available and unique intervention strategies. By providing the information and resources within this guide, the therapist will be able to provide the best client centered care for the veteran population. For the complete Occupational Therapy Veteran Resource Guide, please see Appendix A.

CHAPTER V

SUMMARY

A product was developed to provide a detailed resource guide for occupational therapists working with the veteran population. Modeled from the roles of occupational therapists as expressed in The Occupational Therapy Practice Framework: Domain and Process 2nd Edition [OTPF] (AOTA, 2008), the product provides resources for occupational therapists who may be called upon to step into the advocacy, education or consultation roles with clients who are veterans.

This product was designed to be utilized by occupational therapists, ranging from new graduates to experienced, working with the veteran population across a broad spectrum of contexts and healthcare facilities. This product can be used to assist occupational therapist in advocating for their veteran clients as well as educating and consulting with other healthcare professionals. The product has four sections; section one identifies specifics of the military culture, section two focuses on VA eligibility and access, section three identifies military specific diagnoses and section four provides information regarding military specific assessments.

There are limitations to the use of this product. Information regarding the military culture was provided; however, the amount of information regarding the military culture appears endless. Therefore, for this product, a general overview of the military culture was provided, thus this product should not be a sole resource to gaining an understanding of the military culture. Additionally, VA eligibility and access is constantly changing. In

order for this product to stay relevant, it must be updated on a consistent basis. Furthermore, with ever changing demographics of the veteran population as well as where and how wars are being fought, the military specific diagnoses are subject change along with the military specific interventions and assessments.

While this product may have several limitations, it can be concluded that an occupational therapy veteran resource guide will be beneficial, and essential, for occupational therapists working in the private sector with the veteran population. This product is designed to provide occupational therapists with a working knowledge regarding the military culture, VA eligibility and access, as well as specific military diagnoses. This product will assist occupational therapists in building rapport with the veteran population as well as provide client-centered and evidenced-based practice.

References

American Occupational Therapy Association (AOTA, 2008). Occupational therapy practice framework: Domain and process (2nd ed.) *American Journal of Occupational Therapy*, 62, 625-683. doi:10.5014/ajot.62.6.625

American Occupational Therapy Association (AOTA, 2007). Occupational therapy's role in veterans' health care. Retrieved from www.aota.org/Students/Advocate/AdvocacyFact/40487.aspx

Arredondo, J., Foote, N., Pruden, J. D., McFarland, M. J., & McFarland, L. V. (2010). Wounded warrior's perspectives: Helping others to heal. *Journal of Rehabilitation Research & Development*, *47*(4), 21-28. Doi: 10.1682/JRRD.2009.02.0021

Betthauser, L.M., Bahraini, N., Krengel, M.H., & Brenner, L.A. (2012). Self-report measures to identify post traumatic stress disorder and/or mild traumatic brain injury and associated symptoms in military veterans of operation enduring freedom(OEF)/operation Iraqi freedom (OIF). *Neuropsychology Review, 22*, 35-53. doi: 10.1007/s11065-012-9191-4

Borowsky, S. J. & Cowper, D. C. (1999). Dual use of VA and Non-VA primary care. *Journal of General Internal Medicine*, 14, 274-280. Doi: 10.1046/j.1525-1497.1999.00335.x

Brewin, C.R., Andrews, B., Hejdenberg, J., & Stewart, L. (2012). Objective predictors of delayed-onset post-traumatic stress disorder occurring after military discharge. *Psychological Medicine,* 1-8. doi: 10.1017/S0033291712000189

Burgess, J. F. & Defiore, D. A. (1994). The effect of distance to VA facilities on the choice and level of utilization of VA outpatient services. *Social Science & Medicine*, 39(1), 95-104.

Champion, H. R., Bellamy, R. F., Roberts, P. & Leppaniemi, R. (2003). Profile of combat injury. *The Journal of Trauma*, *54*(5), pp. 13-19. doi: 10.1097/01.TA.0000057151.02906.27

Coll, J.E., Weis, E.L., & Yarvis, J.S. (2011). No one leaves unchanged: Insights for civilian mental health care professionals into the military experience and culture. *Social Work in Health Care, 50,* 487-500. doi: 10.1080/00981389.2010.528727

Curtin C.M., Suarez P.A., Di Ponio L.A., & Frayne S.M. (2012). Who are the women and men in veterans health administration's current spinal cord injury population? *Journal of Rehabilitation Research &* Development, *49*(3) pp.351–60. doi: 10.1682/JRRD.2010.11.0220

Damon-Rodriquez, J. D., White-Kazemipour, W., Washington, D., Villa, V., Dhanani, S., & Harada, N.D. (2004). Accessibility and acceptability of the department of veteran affairs health care: Diverse veterans perspectives. *Military Medicine*, *169*(3), 243-250.

Garske, G.G. (2011). Military-related PTSD: A focus on the symptomatology and treatment approaches. *Journal of Rehabilitation, 77*(4), 31-34.

Hall, L. K. (2011). The importance of understanding military culture. *Social Work in Health Care*, *50*(1), 4-18. doi: 10.1080/00981389.2010.513914

Halvorson, A. (2010). Understanding the military: The institution, the culture and the people. Retrieved from partnersforrecovery.samhsa.gov/docs/Military_White_Paper_Final.pdf

Hobbs, K. (2008). Reflections on the culture of veterans. *American Association of Occupational Health Nurses Journal, 56*(8), 337-341. doi: 10.3928/08910162-20080801-07

Mendes, D.D., Mello, M.F., Ventura, P., Passarela, C.M. & Mari, J.J. (2008). A systematic review on the effectiveness of cognitive behavioral therapy for posttraumatic stress disorder. *International Journal of Psychiatry in Medicine, 38*(3), 241-259. doi: 10.2190/PM.38.3.b

Mooney, C., Zwanziger, J., Phibbs, C. S., & Schmitt, S. (2000). Is travel distance a barrier to veterans' use of VA hospitals for medical surgical care. *Social Science and Medicine*, *50*, 1743-1755.

Reger, M.A., Etherage, J.R., Reger, G.M., & Gahm, G.A. (2008). Civilian psychologists in an army culture: The ethical challenge of cultural competence. *Military Psychology, 20*, 21-35. doi: 10.1080/08995600701753144

Shen, Y., Hendricks, A., Zhang, S. & Kazis, L. E. (2003). VHA enrollees' health care coverage and use of care. *Medical Care Research and Review*, *60*(2), 253-267. doi: 10.1177/1077558703060002007

Taylor, C., & Jeffery, S. (2009). Management of military wounds in the modern era. *Wounds International*, *5*(4), pp. 50-58.

United States Department of Veterans Affairs (2009). Facts about the department of veterans affairs. Retrieved from

http://www.va.gov/opa/publications/factsheets/fs_department_of_veterans_affairs.pdf

United States Department of Veterans Affairs (2012a). History-VA history. Retrieved from http://www.va.gov/about_va/vahistory.asp

United States Department of Veterans Affairs (2006). VA history in brief. Retrieved from http://www.va.gov/opa/publications/archives/docs/history_in_brief.pdf

United States Department of Veterans Affairs (2012b). Veterans health benefits guide. Retrieved from http://www.va/gov/healthbenefits/resources/publications.asp

Vandenberg, P., Bergofsky, L. R., & Burris, J. F. (2010). The VA's systems of care and the veterans under care. *Journal of the American Society on Aging*, *34*(2), 13-19.

Vogt, D. (2011). Mental health-related beliefs as a barrier to service use for military personnel and veterans: A review. *Psychiatric Services, 62*(2), 135-142. doi: 10.1176/appi.ps.62.2.135

Wakefield, B. J., Tripp-Reimer, T., Rosenbaum, M.E. & Rosenthal, G. E. (2007). Veterans' use of department of veterans affairs care and perceptions of outsourcing inpatient care. *Military Medicine*, *172*(6), 565-571.

Weld, K. K., Padden, D., Ricciardi, R., & Garmon Bibb, S.C. (2009). Health literacy rates in a sample of active duty military personnel. *Military Medicine, 174*, 1137-1143.

APPENDICES

Appendix A

Appendix B

An Occupational Therapy Veteran Resource Guide

A Scholarly Project

Submitted to the Occupational

Therapy Department

of the

University of North Dakota

In partial fulfillment

of the requirements

For the degree of

Master's of Occupational Therapy

By

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Grand Forks, North Dakota

May 2013

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Overview of Product

The military itself is a unique culture of its own. (Reger, Etherage, Reger, & Gahm, 2008). Most civilian healthcare workers have limited knowledge regarding military culture. As an occupational therapist working with any culture it is imperative to recognize and understand the culture prior to providing treatment (Hall, 2011; Reger et al, 2008). While a majority of the veteran population receives services at the Department of Veterans Affairs (VA) an unexpected 25-40% of veterans receive additional or sole services by the private sector (Borowsky & Cowper, 1999; Shen, Hendricks, Zhang & Kazis, 2003). With close to 25 million veterans and up to 40% receiving some sort of care from the private sector it is essential that civilian healthcare workers have a working knowledge of the unique military culture, general eligibility requirements and types of programs available within the VA as well as specific military diagnoses and assessments.

This product was designed to be utilized by occupational therapists across a broad spectrum of contexts and throughout the various stages of patient care. It will provide you with a detailed understanding of the military culture, VA eligibility and access as well as military specific diagnoses. The Occupational Therapy Veteran Resource Guide consists of four sections, focusing on the unique aspects of the military culture, VA eligibility and access, military specific diagnoses and military specific assessments. With the use of this product, you will have a working knowledge to provide client-centered care to the veteran population.

Section one, which addresses military culture, focuses on providing you with a knowledge base regarding military values and beliefs as well as habits, roles and routines common to the military role. In order to consult, educate or advocate at the person or population level, you must have a working knowledge with regard to the military culture. Section two,

which addresses veteran eligibility and access to the VA, focuses on providing you with information and resources needed to understand how the VA system operates. With an understanding of the general eligibility requirements, and types and locations of specific program available, you will have the ability to consult or educate other therapists and interdisciplinary team members, as well as advocate for full utilization of resources available for their client. Section three, which addresses four military specific diagnoses, provides you with an understanding of military definitions, injury etiology, military related terminology, as well as unique assessments and intervention strategies used within the VA. By gaining an understanding of the aforementioned items, you can advocate to integrate new assessments and intervention strategies into their facility. Once you have a working knowledge of the assessments and intervention strategies commonly used within the VA, you will better be able to educate and serve as a consultant to other occupational therapists as well as interdisciplinary team members.

The overall goal of the Occupational Therapy Veteran Resource Guide is for you to gain a working knowledge of the unique military culture, a basic understanding of VA eligibility requirements and access, as well as military specific diagnoses, including assessments and intervention strategies. By utilizing the information and resources within this guide, you will be able to provide the best client centered care for the veteran population as an advocate, educator or consultant.

Section I:

The Culture

of the Military

The Culture of the Military

"The unique culture of the military is, indeed, a diverse group of people in American society that must be understood as uniquely different from the civilian world," (Hall, 2012, p. 4). As a civilian working with veterans, it is important to gain a foundational knowledge on a variety of aspects of military culture and military life. The military itself is a unique culture with its own language, norms of behavior, procedures and beliefs (Reger, Etherage, Reger, & Gahm, 2008). Most civilian healthcare workers have limited knowledge regarding military culture. As a healthcare provider working with any culture, it is critical to recognize and understand the culture prior to providing treatment (Hall, 2011; Reger et al, 2008). With close to 25 million veterans and up to 40% receiving some sort of care from the private sector, it is essential that civilian healthcare workers become familiar with the unique military culture including: military values, therapeutic use of self when working with the veteran population, characteristics of the military culture, language and the military alphabet, and military ranks (Halvorson, 2010; Reger et al, 2008).

Military Values

Understanding military values can assist you in building rapport with the veteran population. The military values influence how veterans live their lives outside of the military.

Table 1.1

Branch of Service	Values
United States Navy	✓ Motto: Semper Fortis "Always Courageous" ✓ Mission: "to maintain, train and equip combat-ready Naval forces capable of winning wars, deterring aggression and maintaining freedom of the seas" ✓ Values: honor, courage, commitment
United States Marine Corps	✓ Motto: Semper Fidelis, "Always Faithful" ✓ Mission: the seizure or defense of advanced naval bases and other land operations to support naval campaigns, development of tactics, techniques and equipment use by amphibious landing forces and other duties as the President may direct ✓ Values: honor, courage, commitment
United States Air Force	✓ Moto: Above All ✓ Mission: "to deliver sovereign options for defense of the United States of America and its global interests to fly and fight in air, space and cyberspace" ✓ Values: integrity first, service before self and excellence in all we do
United States Coast Guard	✓ Motto: Semper Paratus, "Always Ready" ✓ Mission: "to protect the public, the environment and the United States economic and security interests in any maritime region in which those interests may be at risk, including international waters and America's coasts, ports, and inland waterways" ✓ Values: honor, respect and devotion to duty

Taken from Ernold, J. (2012)

Therapeutic Use of Self

In order to become ethical practitioners with regard to multiculturalism, you must have the following abilities, according to Hall (2012):

- ✓ Becoming aware of our own behavior, values, biases, preconceived notions and personal limitations.
- ✓ Understanding the worldview of our culturally different clients without negative judgment.
- ✓ Actively developing and practicing appropriate, relevant and sensitive strategies in working with our culturally diverse clients.

In order to work on the three aforementioned skills, according to Hall (2012), you must gain an understanding of the following; reasons why members join the military, characteristics of military culture, and psychological results of living in a fortress.

Table 1.2

Reasons Why Members Join The Military	
Family Tradition	✓ Young people who grew up in the military often state that they join as the military life is more comfortable for them than civilian life. ✓ Children who grow up on a base, or military installation, go to schools on or near base may not know much about living outside of the military world. i. One woman who grew up in a military family stated she felt anxiety about living in the civilian world as she understood the military culture so well and knew little about civilian life (Hall, 2008).
Benefits	✓ The military has been called the "great equalizer" with regard to income. ✓ Young people whose future plans are unclear often utilize the military as a transitional opportunity until they pinpoint what they would like to do with their lives. ✓ Young people who come from low income households may utilize the military as a road to education, respect and prestige that would, according to their perceptions, likely be unattainable if they were to remain in the civilian world (Hall, 2008).

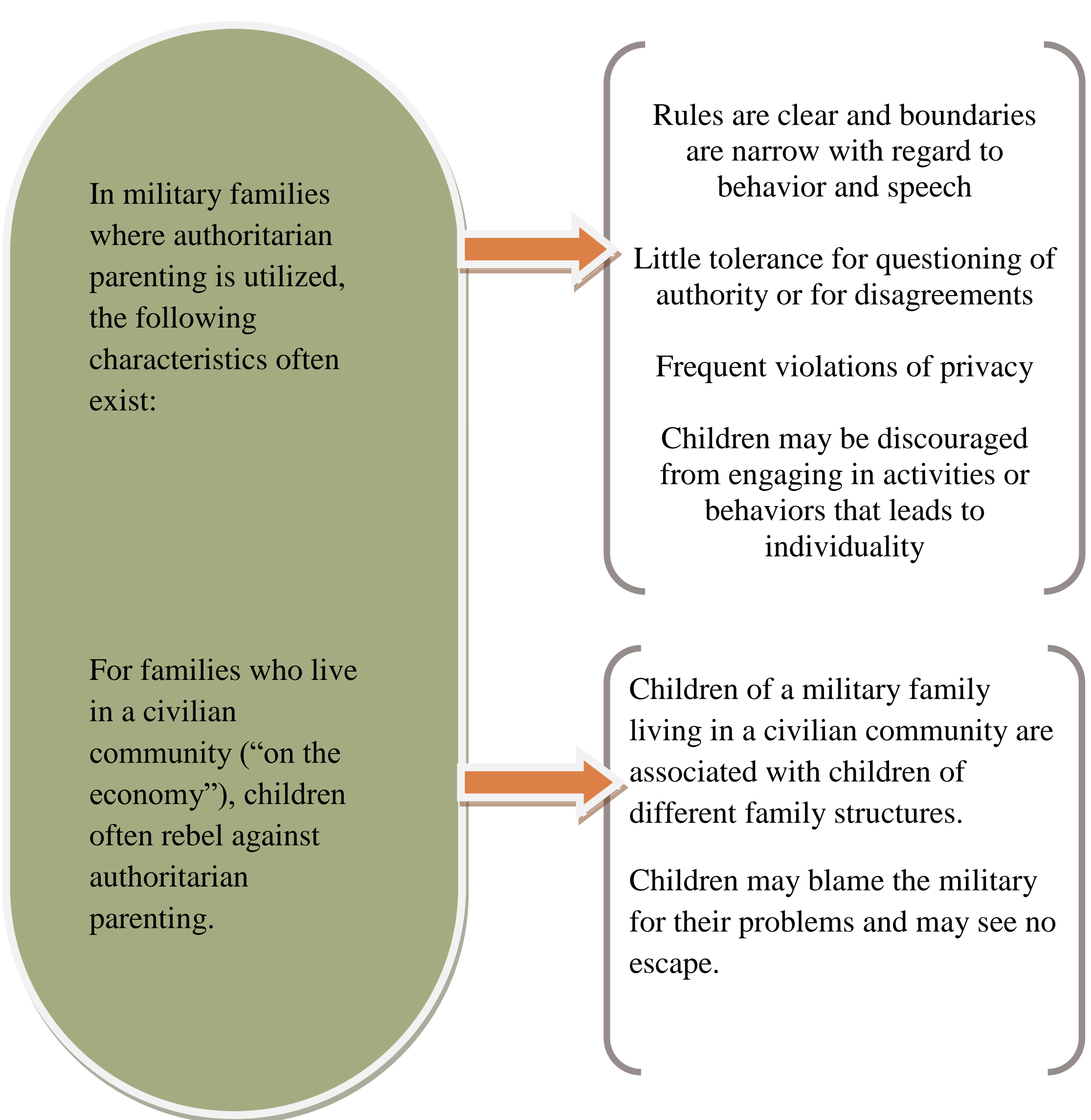
Identity of The Warrior	✓ "Those whose personality and needs fit with the military culture often find themselves making the military a career," (Hall, 2012, p. 7). ✓ The rules, structure, expectations and penalties are often thought of as part of the identity of a warrior. The military also provides members feelings of security, an identity, and sense of purpose. ✓ Young men often merge their identity with that of a warrior as the military reinforces a certain belief system and allows members to be a part of something meaningful. ✓ Passing the test of manhood can be done through the military, a rite of initiation, of sorts.
An Escape	✓ The military, and the 'family' it provides, may be able to satisfy the need of certain people who did not have the family experience when growing up.

Characteristics of Military Culture

Authoritarian Structure

A military family has to learn to adapt to the rigidity, regimentation and conformity that's required within the military system. It is important to adapt as the aforementioned characteristics often extend from service into the home life and structure of a military family.

Figure 1.1



Isolation and Alienation

Isolation and alienation can be felt by the majority of military members and their families as there is a need for tremendous mobility.

- ✓ Isolation and alienation is often the result of the need for military families to be extremely mobile with regards to geographical location.
- ✓ Isolation can increase further as a result of the language of the military, as there are many acronyms and idiosyncratic terms.
- ✓ As a therapist, one must understand that, when working with military families, work may be interrupted for military enforced reasons, which could pose a challenge for continuity of care.
- ✓ Tours of duty also create isolation for families. A tour of duty is the length of time in which a military member and their immediate family is stationed at a particular base. A tour of duty is often three years; however, tours can be every year.
- ✓ Often military families and children are unwilling to make commitments to friends or the community they are currently living in as they are unsure when they will be moving next.

Class System

There are two distinct subcultures within the military. The subcultures within in the military include the enlisted and officers.

- ✓ Enlisted
  - o Typically enter the military immediately following high school, or do not have the college degree necessary to make the military member a candidate to enter the military as an officer.
- ✓ Officer
  - o Non-commission officers (otherwise known as non-coms or NCOs) are usually the top five pay grades within the enlisted rank.
  - o Typically have a four year degree from a university.
- ✓ Distinction between enlisted and officer is evident in many areas of military life
  - o Housing is separated into singles area, enlisted family house area, and officers' quarters in another.
  - o Each area has a distinct appearance, quality and size.
  - o Children of officers and enlisted service members may attend school together, although usually do not associate outside of the school setting.

N

Note: It is important that you have an awareness that enlisted service members can potentially respond differently than officers, which can lead to difficulties establishing rapport.

Parent Absence

- ✓ Military parents are often absent from big events, such as graduation, birthdays, prom, ect., as well as daily routines.
  - ✓ “Parent absence during important events can be crushing for young people; but for these families, nothing new,” (Hall, 2008, p. 51).
- ✓ The military parent may distance themselves from their family.
  - ✓ Physically- working long hours, spending time outside the home.
  - ✓ Emotionally- self-soothing, alcohol.
- ✓ Families often become comfortable with the military parent being absent.
  - ✓ When the military parent returns home from a deployment, it can feel like an intrusion to the family.
  - ✓ The military parent may encounter resentment from children and their significant other, especially if they attempt to change things or enforce new rules.

Importance of Mission

- ✓ Military members are taught in Basic Training that they are to depend on their new 'family', not their biological family. Members are taught to trust no one but those in their unit.
  - ✓ When the military 'family' is perceived to take precedence over the military members' biological family, conflict may arise.
- ✓ Common values that relate to the importance of the mission:
  - ✓ Maintaining physical fitness.
  - ✓ Training hard prior to deployment in order to reduce casualties.
  - ✓ Never abandoning fellow warriors in combat
  - ✓ The mission and the unit come before the individual.
  - ✓ Never showing weakness to the enemy or fellow warriors.

Preparation for Disaster

- ✓ Unlike the majority of civilian jobs, the military and its members are at a constant state of readiness.
- ✓ Maintaining a constant state of readiness and preparedness for disaster leads to a constant state of stress and pressure on military members and their families.
- ✓ The military cannot function without being constantly ready for disaster, which means military members and their families are constantly under threat of disaster as well, for example losing their loved one, or their loved one becoming injured.

- ✓ **Note:** It is essential to build rapport with your veteran clients. To assist in building rapport, it essential that you understand military characteristics including: authoritarian structure, isolation and alienation, class system, parental absence, importance of mission, and preparation for disaster.

Language

The military language is unique and, according to Reger et al. (2008), present throughout communication within the military. According to Hobbs (2008), civilians often say things that veterans leave unsaid and ask the wrong types of questions. According to Hall (2012), it is important to be aware of what is left unsaid when talking with members of the military.

Term	Definition
Permanent Change of Station (PCS)	When a member of the military transfers to a new base
Expiration of Term Service (ETS)	Separating from the military at the end of service commitment
Basic Combat Training (BCT)	The initial training course which turns a civilian into a military member.
Armed Services Vocational Aptitude Battery (ASVAB)	A timed, multi-aptitude test which was developed and is maintained by the Department of Defense. Scores from this battery determine what jobs one will qualify for in the military.
Military Occupational Specialty (MOS)	Jobs in the Army and Marine Corps
Air Force Specialty Code (AFSC)	Jobs in the Air Force
Ratings/Rate	Jobs in the Navy and Coast Guard
Military Entrance Processing Stations (MEPS)	A location where one looking to join the military goes for final medical evaluation and clearance to join the military.
Armed Forces Qualifying Test	Scores from this test determine whether one is qualified to enlist in the U.S. military
Military Operational Specialty (MOS)/ Special Skill Indicator (SSI)	Provide critical information to the clinician about duties, responsibilities and possible occupational stressors
Redeploying	Returning to the U.S. after a deployment overseas

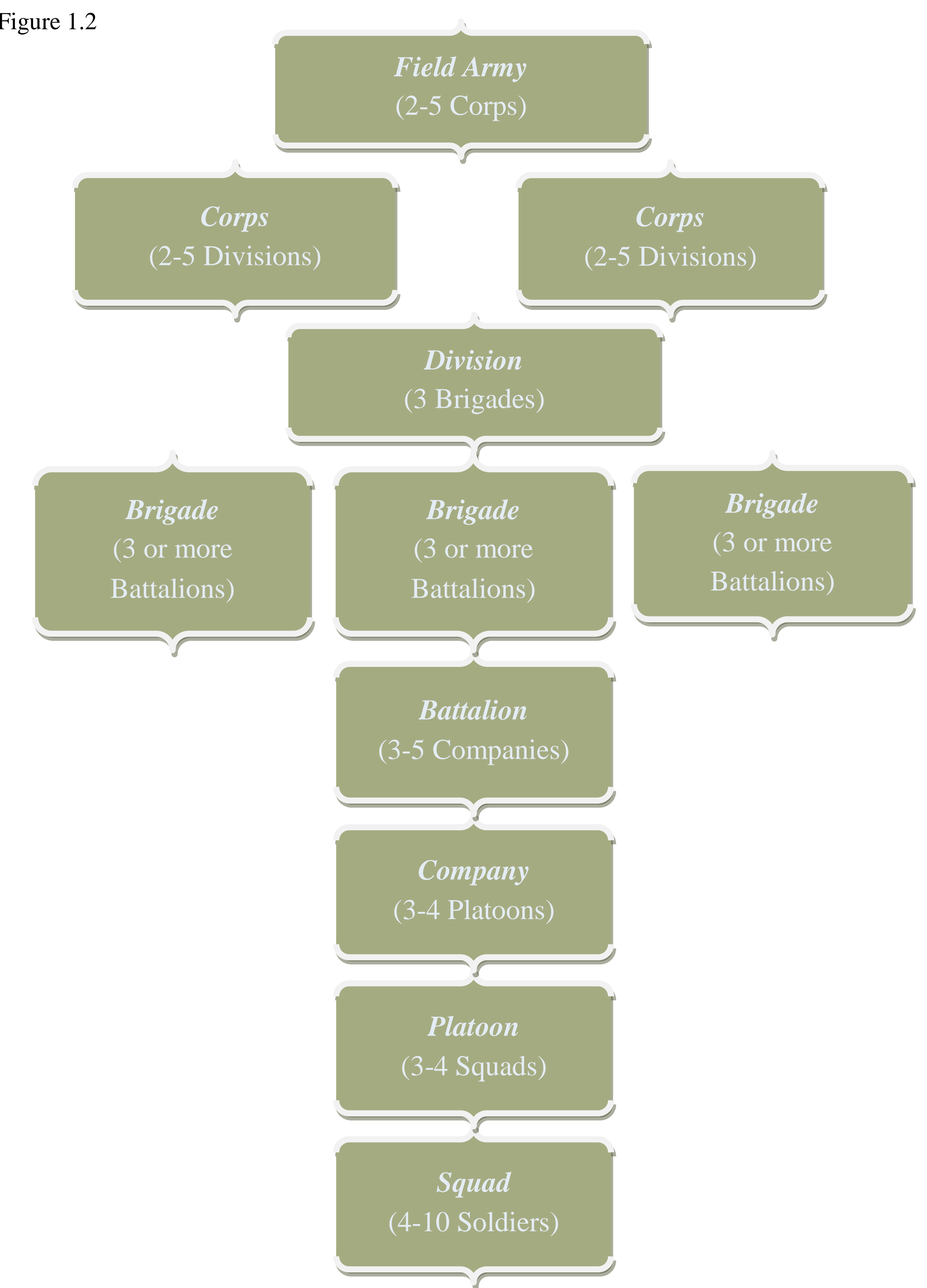
- ✓ In addition to the brief list of examples, readers may go to the following website for a thorough list of terms and acronyms:
  - ✓ http://www.dtic.mil/doctrine/dod_dictionary/

Having a basic understanding of military characteristics as well as an understanding of basic and common military terms is important when developing rapport. Additionally, understanding terms associated with military positions is essential, as it allows you to determine role responsibilities. Some common terms associated with military positions are as follows:

- Fire Team- at most 4 soldiers
- Squad- 4-10 soldiers
- Platoon- 16-40 soldiers or 3-4 squads
- Company- 100-200 soldiers or 3-4 platoons
- Battalion- 500-900 soldiers or 3-5 companies
- Brigade- 3,000-5,000 soldiers or 3 or more battalions
- Division- 10,000-18,000 soldiers or 3 brigades
- Corps- 2-5 Divisions
- Field Army- 2-5 Corps

✓ For a hierarchy of the military positions please continue to page 21.

Figure 1.2



Military Alphabet

The military alphabet is used throughout the different branches of the military. The purpose of the alphabet is to provide a universal system that helps to prevent miscommunications and allows for a universal language throughout the different branches of the military.

Table 1.3

Character	Alphabet	Pronunciation	Character	Alphabet	Pronunciation
A	Alpha	Al fah	**N**	November	No vem ber
B	Bravo	Brah voh	**O**	Oscar	Ooss cah
C	Charlie	Char lee	**P**	Papa	Ppah pah
D	Delta	Dell tah	**Q**	Quebec	Qkeh beck
E	Echo	Eck oh	**R**	Romeo	Rrow me oh
F	Foxtrot	Foks trot	**S**	Sierra	Ssee air rah
G	Golf	Golf	**T**	Tango	Ttang go
H	Hotel	Hoh tell	**U**	Uniform	Uyou nee form
I	India	In dee ah	**V**	Victor	Vvik tah
J	Juliet	Jew lee ett	**W**	Whiskey	Wwiss key
K	Kilo	Key loh	**X**	X-Ray	Xecks ray
L	Lima	Lee mah	**Y**	Yankee	Yyang key
M	Mike	Mike	**Z**	Zulu	Zzoo loo

Taken from militaryalphabet.org

Ranks

A working knowledge of the ranking system the military uses is essential to understanding veterans and the type of service they provided, level of responsibility they had, and stressors they may have faced. The rank of a member of the military may also affect how a healthcare provider builds rapport, trust, and communicates with the military member.

Table 1.4

Rank	Title	Symbol	Abbrev.	How to Address	General Information	Responsibilities
E-1	Private		PVT	Civilian name: John Doe Military: Private Doe	Lowest enlisted rank, entry-level rank for trainees beginning BCT. May be referred to as “recruits”, “trainees” or “fuzzies”. Will be automatically promoted to PV2 after 6 months of service.	Obey the orders of their superior officers.
E-2	Private		PV2	Private Doe	Typically in this position for 6 months prior to being promoted to PFC.	Obey the orders of their superior officers
E-3	Private First Class		PFC	Private Doe	Privates are automatically promoted to PFC rank after one year of service, or earlier at the discretion of their commanding officer.	Carry out the orders issued by their commanding officers.

E-4	Specialist		SPC	Specialist Doe	Rank becomes available after two years of service and upon completion of an officer and leadership candidate training course.	Basic management duties, may command soldiers of lower rank.
E-4	Corporal		CPL	Corporal Doe	Is the first of the NCO ranks. Some CPL may be given a permanent ranking of CPL in order to take on a support role, such as a desk job which may include recruiting.	Greater leadership and management than an SPC, may be placed in command of a fireteam, are responsible for the training and performance of their soldiers
E-5	Sergeant		SGT	Sergeant Doe	Some soldiers may be promoted to Drill Sergeant, which would require additional experience and training.	Command fireteams or a squad, have a large influence on the everyday lives and activities of their men.
E-6	Staff Sergeant		SSG	Sergeant Doe	Is an NCO, usually has one or more SGT serving under them	In command of a squad. In rare situations, may be placed in command of a platoon.
E-7	Sergeant First Class		SFC	Sergeant Doe	Is the first senior NCO, most commonly assigned the role or Platoon Sergeant and serve as the chief advisor/assistant to the Platoon Leader. SFC usually has 15-18 years of Army experience.	May be in command of 40 soldiers in a rifle platoon or 18 soldiers and 4 tanks in an armor platoon.
E-8	Master Sergeant		MSG	Sergeant Doe	Often specialized in a certain field or subject matter. May be eligible for multiple types of allowances and bonuses, eg food, personal money allowance, retirement benefits.	Serves as the Brigades NCO in Charge, less leadership responsibilities than 1SG

E-8	First Sergeant		1SG	First Sergeant Doe	Answers to the Company Commander and commissioned officers. Eligible for benefits and retirement.	Serves as the senior enlisted member of their company, leadership duties such as training soldiers, sergeants and officers.
E-9	Sergeant Major		SGM	Sergeant Major Doe	The highest enlisted rank in the Army, eligible for benefits and retirement.	Assists Officers in a Battalion sized force, leads soldiers and junior officers placed directly under their command.
E-9	Command Sergeant Major		CSM	Command Sergeant Major Doe	Senior enlisted member of his unit, senior representative of the enlisted soldiers and NCOs serving under him, eligible for retirement and benefits.	Serves as a special advisor to the commanding officer of his Battalion, cares for his unit's battle flag, senior representative.
E-9	Sergeant Major of the Army		SMA	Sergeant Major of the Army Doe	Unique position held by only one individual at a time, eligible for retirement and benefits.	Serves as the spokesperson and advocate of the enlisted soldiers, operates out of the office of the Chief of Staff of the Army and serves as his senior advisor and consultant.
W-1	Warrant Officer 1		WO1	Mr. Doe or Chief Doe	To be appointed as WO1, one must be proficient at leading and their technical specialty, must submit a written application, eligible for retirement and benefits, bonus pay including hazard pay.	Responsibilities similar to a commissioned officer but require technical abilities and experience that a commissioned officer would not have.
W-2	Chief Warrant Officer 2		CW2	Mr. Doe or Chief Doe	Officially appointed by the Secretary of the Army, intermediate level experts in both technical and tactical aspects of leading in their field.	Similar responsibilities as a CW1, also lead at the battalion level.

W-3	Chief Warrant Officer 3		CW3	Mr. Doe or Chief Doe	Are officially appointed by the Secretary of the Army, are advanced level experts at both technical and tactical aspects of leading in their field.	Provide guidance, assistance and supervision to subordinates, typically support operation from team to brigade levels.
W-4	Chief Warrant Officer 4		CW4	Mr. Doe or Chief Doe	Officially appointed by the Secretary of the Army, senior level experts in technical and tactical aspects of leading in their field.	Serve as mentors to lower WO, speak to commanders about WO issues, support operations at the Battalion, Brigade, Division, Corps, and Echelon levels above Corps operations.
W-5	Chief Warrant Officer 5		CW5	Mr. Doe or Chief Doe	Highest WO rank in the Army, officially appointed by the Secretary of the Army, master level experts of both technical and tactical aspects of leading in their field, require intricate technical abilities and experience	Have extra leadership and representation responsibilities as well as the typical WO responsibilities, help with leader development, mentorship and advising warrant and branch officers, support operations at battalion, brigade, division, corps levels.
O-1	Second Lieutenant		2LT	Lieutenant Doe	Is an entry level commissioned officer rank, unofficially referred to as "butterbars" or "nuggets", soldiers who have a 4 year college degree combine with OCS or who have completed a ROTC program may enter as a 2LT.	Generally placed in command of a platoon which has 16-44 soldiers and two or more rifle squads.

O-2	First Lieutenant		1LT	Lieutenant Doe	Generally awarded automatically to 2LTs who have served for 18-24 months.	Serve as the platoon leader of a specialized weapons platoon, or as the executive officer of a company consisting of 70-250 soldiers.
O-3	Captain		CPT	Captain Doe	A commissioned officer at company level, are assisted by several junior Cos and one or more senior NCO	Generally serve as a Company Commander in control of 62-190 solders, in charge of tactical and everyday operations of their troops, may also have teaching roles at combat schools or special training sessions, serve as staff officers at battalion level command posts.
O-4	Major		MAJ	Major Doe	The first field officer in the Army, most majors attend Command and General Staff school in Kansas for a ten month course.	Serve as specialized executive of operations for battalion sized unit of 300-1200 soldiers, may also lead companies such as Special Operations units, or serve as staff officers in high-level command posts.
O-5	Lieutenant Colonel		LTC	Colonel Doe	Generally takes an officer 16-22 years to rise to the rank of LTC	Serves as battalion commander, are assisted by one or more MAJ, many junior NCOs and a Command Sergeant Major, may also serve as an Executive Officer or Staff Officer in a variety of high-level units or command posts.

O-6	Colonel		COL	Colonel Doe	Almost all COL receive special training at the Army War College in Pennsylvania, is the senior field-officer grade.	Command a brigade-sized unit with the assistance of several junior COs and a Command Sergeant Major, may also be responsible for leading division-level special agencies.
O-7	Brigadier General		BG	General Doe	Serves as the advisor and Deputy Commander to a Major General	As Deputy Commander to a MG, the BG helps with commanding a division-sized unit of 10,000-15,000 soldiers, assists in overseeing the tactical planning and coordination of division of operations.
O-8	Major General		MG	General Doe	MG is the highest permanent peacetime rank in the Army. Can only be appointed by nomination and review by multiple officers and promotion boards. Officers receiving a commission as an MG are required to retire after 5 years of commission, or after 35 years of total service, unless promoted or reappointed.	Commands a division-sized unit of 10,000-15,000 soldiers.
O-9	Lieutenant General		LTG	General Doe	LTG is a temporary position reserved for times of war, and expires with the end of the general's active tour of duty, typically 3-5 years.	Commands a Corps-sized unit of 20,000-45,000 soldiers, serves as a senior staff officer or department head in various domestic or overseas headquarters.

O-10	General		GEN	General Doe	GEN is the highest rank attainable by an officer besides the war-time only GA rank. The Army can have a maximum of 7 GEN at one time, with several of the slots filled permanently, eg the Army Chief of Staff. A GEN typically has over 30 years of Army experience. A GEN is nominated by the President and must be confirmed for duty by the Senate before they may begin their term of service. All GEN ranks are temporary, a GEN must retire after 40 years of service or after their 64th birthday, although the deadline can be extended by the Army Chief of Staff or the President.	Commands all operations taking place within their geographical location.
O-10	General of the Army		GA	General Doe	GA is the highest rank attainable in the US Army, is reserved exclusively for wartime in which the commander of the US Army must hold a rank equal or greater than that of the commanding officers from other nations. There have been no active duty GA since WWII.	

Section II:

Eligibility & Access

Eligibility & Access

Determining eligibility and access is essential for providing your client with the best client centered care possible. The VA is a highly recognized system around the world and is complex in how it operates. The primary goal of the VA is to provide federal benefits to veterans (United States Department of Veterans Affairs, 2009). The benefits veterans receive from the VA system are immense. The VA system provides the full range of medical services to veterans all across America including: primary care, health promotion, disease prevention, surgery, palliative care, critical care, women's and men's mental health, orthopedics, rehabilitative therapies and many more (United States Department of Veterans Affairs, 2012b). With the VA being a highly recognized health care system around the world along with the numerous benefits for veterans, it is imperative that you have a knowledge based understanding of eligibility and access for the veteran population.

Determining Eligibility

According to the VA, there are a few questions to assist individuals or healthcare professionals in determining if veterans may qualify for health care benefits from the Department of Veterans Affairs

Figure 2.1

Determine if any of the following statements are true regarding your client

1. Your client has served in the active military, naval, or air service **and** was honorably discharged or released
   - ✓ **Active service**—state active duty service, federally funded state active service, or federal active service, but does not include service performed exclusively for training, including basic combat training, advanced individual training, annual training, inactive duty training or special training
   - ✓ **Honorable discharged--**any discharge categorized other than dishonorably discharged

2. Your client was a Reservist or National Guard member and was called to active duty by a Federal Order (for other than training purposes) **and** completed the full call-up period
   - ✓ **Reservist**—members of military services who are not in active service but who are subject to call of active duty
   - ✓ **Full call-up period**—procedures by which the President, without a declaration of national emergency, brings up all or part of the Army National Guard to active federal service

If either question 1 or 2 or both statements are true continue on to questions 3-11

3. Your client was discharged or separated for medical reasons, early out or hardship

4. Your client served in theater of combat operations within the past 5 years

5. Your client was discharged from the military because of disability (not preexisting)

6. Your client was a former Prisoner of War (POW)

   - ✓ **POW**—a person who, while serving in the active military, naval or air service was forcibly detained by opposing forces in the line of duty

7. Your client received of Purple Heart Medal

   - ✓ **Purple Heart Medal**—awarded to military personnel for being wounded or killed in any action against an enemy of the United States

8. Your client received VA pension or disability benefits

9. Your client received state Medicaid benefits

10. You client served in the Republic of Vietnam from January 9th, 1962 to May 7th, 1975

11. Your client served in the Persian Gulf from August 2nd, 1990 to November 11th,

If question 1, 2 or both statements were not true

- Your client most likely will not qualify for VA healthcare benefits; however, based on military history and household income your client may qualify for benefits. It is in the best interest of your client to call the VA with further questions at 1-800-222-8387 regarding household income qualifications

If questions 1, 2 or both statements were true, but no statements from questions 3-11 were true

- Your client will most likely not qualify for VA healthcare benefits; however, based on military history and household income your client may qualify for benefits. It is in the best interest of your client to call the VA for further assistance at 1-800-222-8387 regarding household income qualifications

If questions 1, 2 or both statements were true as well as one or more statements from questions 3-11 were true

- There is a high probability that your client qualifies for VA healthcare benefits. It is in the best interest of your client to apply for VA health care benefits.

Taken from Department of Defense, 2010; United States Department of Veterans Services, 2012a

While determining if your client qualifies to receive VA health care services and applying to receive such benefits may appear daunting and time consuming it will benefit your client in the future, even if he or she does not qualify currently.

- ✓ **Note:** Even though your client may not meet current qualifications, the VA automatically re-assesses every application if new regulations take effect. Therefore, it is beneficial to complete the application even though your client may not qualify for benefits.

Options to apply for VA health care benefits include:

- By phone: 1-877-222-8387
- By mail: print the 10-10EZ form and mail to

  Health Eligibility Center
  2957 Clairmont Road Suite 200
  Atlanta, GA 30329-1647
- In person: at the nearest VA Medical Center or clinic
- Online at

  https://www.1010ez.med.va.gov/sec/vha/1010ez/Form/1010ez.pdf

VA Priority Groups

Once your client has applied for enrollment in the VA health care system, his or her eligibility will be verified. Based on each applicant's specific eligibility status, he or she will be assigned to a Priority Group. Priority Groups range from 1-8, with group 1 being the highest priority for enrollment.

- ✓ **Note:** individuals may be eligible in more than one priority group. If that is the case, the VA will place individuals in the highest priority group they qualify for.

Table 2.1 **VA Priority Groups**

Priority Group 1
✓ **Veterans with VA Service-connected disabilities rated 50% or more**
✓ **Veterans assigned to total disability rating for compensation based on unemployability**
Priority Group 2
✓ **Veterans with VA Service-connected disabilities rated 30% or 40%**
Priority Group 3
✓ **Veterans who were former prisoners of war**
✓ **Veterans who were awarded the Purple Heart Medal**
✓ **Veterans whose discharge was for a disability incurred or aggravated in the line of duty**
✓ **Veterans with VA Service-connected disabilities rated 10% or 20%**
✓ **Veterans awarded special eligibility classification under Title 38, U.S.C., 1151, "benefits for individuals disabled by treatment or vocational rehabilitation."**
Priority Group 4
✓ **Veterans receiving increased compensation or pension based on their need for regular aid and attendance or by reasons of being permanently housebound**
✓ **Veterans determined by VA to be catastrophically disabled**
Priority Group 5
✓ **Nonservice-connected Veterans and noncompensable Service-connected Veterans rated 0%, whose annual income and/or net worth are not greater than the VA financial thresholds**
✓ **Veterans receiving VA pension benefits**
✓ **Veterans eligibility for Medicaid benefits**

Priority Group 6
✓ **Compensable 0% Service-connected Veterans**
✓ **Veterans exposed to ionizing radiation during atmospheric testing or during the occupation of Hiroshima and Nagasaki**
✓ **Project 112/SHAD participants**
✓ **Veterans who served in the Republic of Vietnam between January 9, 1962 and May 7, 1975**
✓ **Veterans who served in the Southwest Asia theater of operations from August 2, 1990, through November 11, 1998**
✓ **Veterans who served in a theater of combat operations after November 11, 1998, as follows:** ○ **Veterans discharged from active duty on or after January 28, 2003, for five years post discharge**
Priority Group 7
✓ **Veterans with incomes** below **the geographic means test income thresholds and who agree to pay the applicable copayment**
Priority Group 8
✓ **Veterans with gross household income above the VA national income threshold and the geographically-adjusted income threshold for their resident location and who agrees to pay co-pays**
✓ Veterans eligibility for enrollment: **Noncompensable 0% service-connected and:** ○ **Subpriority A: Enrolled as of January 16th, 2003, and who have remained enrolled since that date and/or placed in this subpriority group due to changed eligibility status** ○ **Subpriority B: Enrolled on or after June 15th, 2009 whose income exceeds the current VA National Income Thresholds or VA National Geographic Income Thresholds by 10% or less**
✓ Veterans eligible for enrollment: **Nonservice-connected and:** ○ **Subpriority C: Enrolled as January 16th, 2003, and who remained enrolled since that date and/or placed in this subpriority due to changed eligibility status** ○ **Subpriority D: Enrolled on or after June 15th, 2009 whose income exceeds the current VA National Income Thresholds or VA National Geographic Income Thresholds by 10% or less**
✓ Veterans not eligible for enrollment: **Veterans not meeting the criteria above:** ○ **Subpriority E: Noncompensable 0% service-connected** ○ **Subpriority G: Nonservice-connected**

Taken from United States Department of Veterans Affairs, 2012e

As a therapist you may have several clients in different VA Priority Groups; however, the same services are generally available to all enrolled veterans. Being familiar with the VA Priority Groups is valuable as it provides an additional resource in determining eligibility. While being familiar with the VA Priority Groups is an additional resource tool in determining VA eligibility for your client, the priority groups can be difficult to understand. Complete the following questions to test your knowledge of the VA Priority Groups.

***1.** What priority group would your client be placed in who was determined as catastrophically disabled, awarded the Purple Heart Medal and eligible for Medicaid benefits?*

***2.** Which priority group would your client be categorized in whose income is below the geographic means test as well as rated as 30%-40% disabled*

***3.** Your client was a former POW, awarded a Purple Heart Medal and has a gross income above the VA national income threshold. Which priority group would they be enrolled in?*

***4.** Your client served in Vietnam from January 23, 1962 through December 16th, 1974 and is assigned a total disability rating*

***5.** Your client enrolled January 23rd, 2003 and is still enrolled; however, his income is higher than the VA national income threshold*

Answers located on pages 38-39.

VA Priority Group Quiz Answers

1. What priority group would your client be placed in who was determined as catastrophically disabled, awarded the Purple Heart Medal and eligible for Medicaid benefits

- ✓ This client would most likely be placed in Priority Group 3. The client was determined as catastrophically disabled putting the client in Priority Group 4. Eligible for Medicaid benefits places the client in Priority Group 5. Being awarded the Purple Heart Medal puts the client in Priority Group 3. The VA always places veterans in the highest priority they are eligible for; therefore, this client would most likely be categorized in Priority Group 3.

2. Which priority group would your client be categorized in whose income is below the geographic means test as well as rated as 30%-40% disabled

- ✓ This client would most likely be placed in Priority Group 2. With an income that is below the geographical means test is an indicator for Priority Group 7. However, being rated as 30%-40% disabled categorizes the client in Priority Group 2.

3. Your client was a former POW, awarded a Purple Heart Medal and has a gross income above the VA national income threshold. Which priority group would they be enrolled in?

- ✓ This client would most likely be placed in Priority Group 3. Both POW and being awarded the Purple Heart Medal are indicators of Priority Group 3. Gross income above the VA national income threshold indicates Priority Group 8. Being placed in the highest priority eligible would categorize this client in Priority Group 3.

4. Your client served in Vietnam from January 23, 1962 through December 16th, 1974 and is assigned a total disability rating

- ✓ This client would most likely be placed in Priority Group 1. Serving in Vietnam from January 23rd, 1962 through December 16th, 1974 is an indicator for Priority Group 6. However, an assigned rating of total disability indicates Priority Group

5. Your client enrolled January 23rd, 2003 and is still enrolled; however, his income is higher than the VA national income threshold

- ✓ This client would most likely be placed in Priority Group 8. Indicators include enrollment after January 16th, 2003 and an income higher than the VA national income threshold.

- ✓ **NOTE:** it is important to understand the VA Priority Groups because it is a valuable resource tool in determining your clients eligibility; however, determining which priority group your client may be categorized in does not meant they will officially be placed in that specific priority group by the VA or even qualify for VA benefits. Eligibility requirements are constantly changing.
  - ✓ To check for updated eligibility requirements go to http://www.va.gov/healthbenefits/

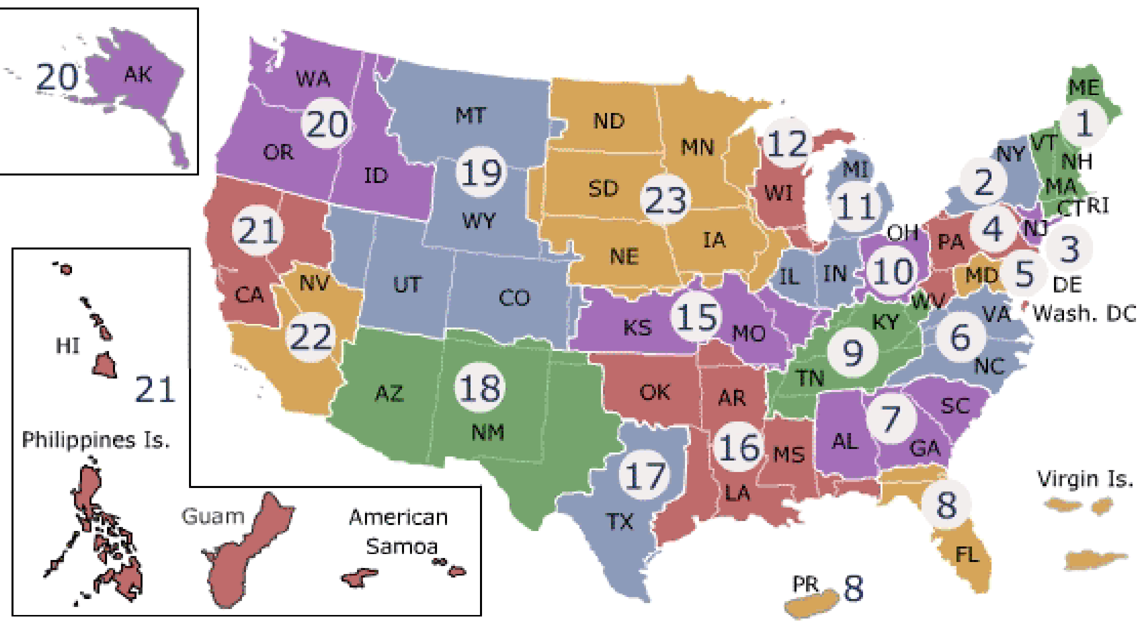
Access

Once your client has been determined eligible for VA health care services there are a variety of facilities to utilize, located around the United States. It is important to assist your client in locating the correct facility to meet his or her current needs.

The VA Health Care facilities are grouped according to locations across the United States. Facilities are categorized in 23 sections divided across the United States. This classification of VA Health facilities is known as the Veterans Integrated Service Network. The Veterans Integrated Service Network was designed to meet local health care needs and provide greater access to care.

Figure 2.2

The Veterans Integrated Service Network



Taken from United States Department of Veterans Affairs, 2012d

The Veterans Integrated Service Network groups a variety of VA health care facilities according to locations across the United States. When choosing a VA health care facility it is important to determine the needs of your client.

Figure 2.3

2 Questions to ask when determining what VA Health Care facility would be most beneficial in meeting the needs of your client

1. Does your client require general medical care?

2. Does your client require specialized medical care such as traumatic brain injury (TBI), spinal cord injury (SCI) or a combination of psychosocial, emotional and physical issues?

If your client requires general medical care from a VA Health Care facility then a facility located in the Veteran Integrated Service Network is appropriate. See page 42.

If your client requires specialized care from a VA Health Care facility then it is recommended that your client access one of the four specialized programs located within the VA Health Care system. See page 44.

If your client requires general medical care, then choosing a facility within the Veteran Integrated Service Network would be the most appropriate choice. The VA Health Care facilities located within the Veterans Integrated Service Network include a variety of facilities such as:

- ✓ VA Health Care System
- ✓ Community Based Outpatient Clinic
- ✓ Vet Centers
- ✓ VA Medical Center
- ✓ Outpatient Clinic
- ✓ Integrated Clinical Facility
- ✓ Others

Taken from United States Department of Veterans Affairs, 2012d

These facilities offer a wide spectrum of health care services. These general services include: health promotion, primary care, disease prevention, diagnosis, palliative care, surgery, prosthetics, critical care, mental health care, women's health care, orthopedics, radiology, and rehabilitation services (United States Department of Veterans Affairs, 2012c). Directions on how to locate facilities within the Veteran Integrated Service Network are located on page 47.

Locations for VA Health Care Facilities within the Veteran Integrated Service Network

- ✓ Go to the United States Department of Veterans Affairs at http://www.va.gov/
- ✓ Under the **Location** tab located on top sidebar click on **Hospitals and Clinics**
  - ✓ Once on the Veterans Health Administration page, you can click on any 1 of the 23 sections on the interactive map
  - ✓ By clicking on 1 of the 23 sections it will list all various types of facilities located within that section
- ✓ **NOTE:** the left hand side bar has quick links for the Vet Centers, Post-Traumatic Stress Disorder (PTSD) programs, Substance Use Disorder programs and interactive maps

Specialized Care Programs in VA

If your client requires specialized care for diagnoses such as TBI, SCI, PTSD, or wound, burns or amputations, then your client would benefit most from receiving care from one of the four specialty programs located within the VA health care system. Specialty regional centers have been established to meet the needs of veterans with specific diagnosis including: SCI, Polytrauma and TBI, as well as PTSD. As addressed by the American Occupational Therapy Association (AOTA, 2007), occupational therapists often address four major diagnoses when working with veterans. These diagnoses include: TBI, PTSD, SCI and Burns, Wounds and Amputations (AOTA, 2007). Identifying locations for those specific diagnoses are critical in allowing our veteran clients to receive the most beneficial treatment available.

VA SCI Centers

The VA Regional SCI Centers serve to enhance the quality of life for veterans with a SCI. Specialized care is provided to individuals with a SCI through an interdisciplinary team including: social workers, nurses, occupational therapists, physical therapists and at least one doctor. A complete list of VA SCI Centers is located on page 46.

Figure 2.4

VA SCI Centers

Taken from United States Department of Veterans Affairs, 2012c

Table 2.2

VA Regional SCI Centers	
California	Long Beach SCI Center 5901 E. 7th St. Long Beach, CA 90822 Phone: 562-826-5701
California	Palo Alto SCI Center 3801 Miranda Ave. Palo Alto, CA 94304 Phone: 800-455-0057
California	San Diego SCI Center 3350 La Jolla Village Drive San Diego, CA 92161 Phone: 858-642-3117
Florida	Miami SCI Center 1201 NW 16th St. Miami, FL 33125 Phone: 1-888-276-1785
Florida	Tampa SCI Center 13000 Bruce B. Downs Blvd. Tampa, FL 33612 Phone: 813-972-7517
Georgia	Augusta SCI Center One Freedom Way Augusta, GA 30904 Phone: 706-823-2216
Illinois	Edward Hines VA SCI Center 5th & Roosevelt Rd. PO Box 5000-5128 Hines, IL 60141 Phone: 708-202-2241
Massachusetts	Boston SCI Center Brockton/West Roxbury Campuses 1400 VFW Parkway West Roxbury, MA 02132 Phone: 617-323-7700
Minnesota	Minneapolis SCI Center One Veterans Drive Minneapolis, MN 55417 Phone: 612-629-7005
Missouri	Jefferson Barracks Division 1 Jefferson Barracks Dr. St. Louis, MO 63125 Phone: 800-228-5459

New Jersey	VA New Jersey Healthcare System 385 Termont Ave. East Orange, NJ 07018 Phone: 973-676-1000
New Mexico	VA Medical Center 1501 San Pedro SE Albuquerque, NM 87108 Phone: 505-256-2849
New York	VA Healthcare System Castle Point, NY Phone: 845-831-2000
New York	VA Medical Center 130 West Kingsbridge Rd Bronx, NY 10468 Phone: 718-741-4110
Ohio	Cleveland SCI Center 10701 East Blvd. Cleveland, Ohio 44106 Phone: 216-791-3800
Tennessee	Memphis SCI Center 1030 Jefferson Ave. Memphis, TN 38104 Phone: 901-577-7373
Texas	VA Medical Center 4500 South Lancaster Rd Dallas, TX 75216 Phone: 214-857-1757
Texas	Houston SCI Center 2002 Holcombe Blvd. Houston, TX 77030 Phone: 800-553-2278
Texas	South Texas Veterans Health Care System Audie L. Murphy Division 7400 Merton Minter Blvd. San Antonio, TX 78229 Phone: 210-617-5300
Virginia	Hampton SCI Center 100 Emancipation Drive Hampton, VA 23667 Phone: 757-722-9961
Washington	Seattle SCI Center 1660 South Columbian Way Seattle, WA 98108 Phone: 800-329-8387

Wisconsin	Milwaukee SCI Center 5000 W. National Ave. Milwaukee, WI 53295 Phone: 888-469-6614
Puerto Rice	San Juan SCI Center #10 Casia Street San Juan, PR 00921 Phone: 787-641-7582

Taken from United States Department of Veterans Affairs, 2012c

VA Polytrauma/TBI Rehabilitation Centers

Polytrauma Rehabilitation Centers provide acute inpatient rehabilitation services. An interdisciplinary team is used and includes individuals such as: physical therapist, occupational therapist, neuropsychologist, case manager, and physiatrist. These team members assist individuals who have sustained multiple physical, cognitive, and emotional injuries resulting from trauma. Services provided at Polytrauma Regional Centers include: inpatient services, outpatient services, discharge planning, emotional support, individual and group counseling, marital and family counseling, education on community resources, case management, employment counseling, and alcohol and drug abuse assessments.

- ✓ **Note:** TBI Centers are located within the Polytrauma Rehabilitation Centers. It is a combined system of care. If your veteran has suffered from a TBI, it would be beneficial to get in contact with the nearest Polytrauma Rehabilitation Center

Polytrauma Regional Centers

Figure 2.5

Taken from Department of Veterans Affairs, 2012b

Table 2.3

Polytrauma Rehabilitation Centers	
California	VA Palo Alto Health Care System 3801 Miranda Ave Palo Alto, CA 94304 Phone: 800-999-5021
Florida	James A. Haley VA Medical Center 13000 Bruce B. Downs Blvd. Tampa, FL 33612 Phone: 888-716-7787
Minneapolis	Minneapolis VA Center One Veterans Drive Minneapolis, MN 55417 Phone: 866-414-5058
Virginia	McGuire VA Medical Center 1201 Broad Rock Blvd. Richmond, VA 23249 Phone: 800-784-8381
Texas	South Texas Veterans Health Care System 7400 Merton Minter San Antonio, TX 78229 Phone: 877-469-5300

Taken from United States Department of Veterans Affairs, 2012b

VA PTSD Programs

The VA PTSD Programs offer specialized treatment for veterans suffering from PTSD. Not every medical center provides the same specialized services; however, each PTSD program does provide the following services: one-to-one mental health assessment and testing, medicines, one-to-one psychotherapy, family therapy, and group therapy. Group therapy covers specific topics related to anger, stress, combat support, and partners or groups for Veterans of specific conflicts. Specialized care for PTSD offered at some locations include: specialized outpatient PTSD programs, specialized intensive PTSD programs as well as specialized community-based outpatient clinics. It is important to determine which type of PTSD program setting is best suited for your client.

- ✓ **Note:** Due to the varied services provided among PTSD Programs, it is beneficial to use the PTSD Program Locator on the VA website. Directions to locate PTSD Programs are located below.

- ✓ Log onto the United States Department of Veterans Affairs website: http://www.va.gov/
- ✓ Under the **Locations** tab, click **Hospitals and Clinics**
- ✓ On the left side tab, click **PTSD Program Locator**
- ✓ Once on this page, you can click on each state or enter your zip code to the find the nearest PTSD Program

Section III:

Military Priority Medical Conditions

Occupational Therapy is a diverse profession that addresses an individual's values, knowledge and skills to participate in everyday occupations in order to promote health and wellbeing (American Occupational Therapy Association [AOTA], 2008). According to AOTA (2007) there are four primary diagnoses often seen within the veteran population including: traumatic brain injury (TBI), spinal cord injuries (SCI), post-traumatic stress disorder (PTSD), and burns, wounds and amputations. For the purpose of this project burns, wounds and amputations are categorized as combat injuries.

Within this section of the product all four primary diagnoses including TBI, SCI, combat injuries, and PTSD will be described in detail. Details within each section will include the military definition and etiology, terminology, and unique considerations for occupational therapy interventions. Unique considerations for occupational therapy interventions will include the following subsections; facts and statistics, assessments, and intervention strategies. It is important to note that the subsections within the unique considerations for occupational therapy interventions may differ among sections as only military related information was included as it is assumed that occupational therapists have a working knowledge of commonly used assessments and interventions for each diagnosis. Additionally, each section is specifically designed to highlight the military culture and its unique definitions and terminology.

Traumatic Brain Injury

Traumatic brain injury (TBI), can have vast functional implications for the veteran population. It is imperative to understand the definition and causes of TBI within the veteran population due to the unique ways in which veterans acquire brain injuries. The distinctive mechanisms of injury often results in unique comorbidities different than those in the civilian population, for this reason, there will be information outlining potential causes of TBI in the veteran population. The information will outline potential theories the VA has considered as to mechanism of injury, which are currently being researched by both the VA and Department of Defense (DOD). In this diagnostic section, sexuality will be discussed in detail as there are specific suggestions provided by the VA when addressing sexuality with a veteran who has suffered a TBI. There is also a list of military specific TBI assessments that can be utilized by an occupational therapist working with the veteran population.

Definition/Etiology

Figure 3.1

- A confused or disoriented state which lasts less than 24 hours
- Loss of consciousness for up to 30 min.
- Memory loss lasting less than 24 hours
- Structural brain imaging (MRI or CT scan) yielding normal results

Moderate TBI

- A confused or disoriented state which lasts more than 24 hours
- Loss of consciousness for more than 30 min. but less than 24 hours
- Memory loss lasting greater than 24 hours but less than 7 days
- Structural brain imaging yielding normal results

Severe TBI

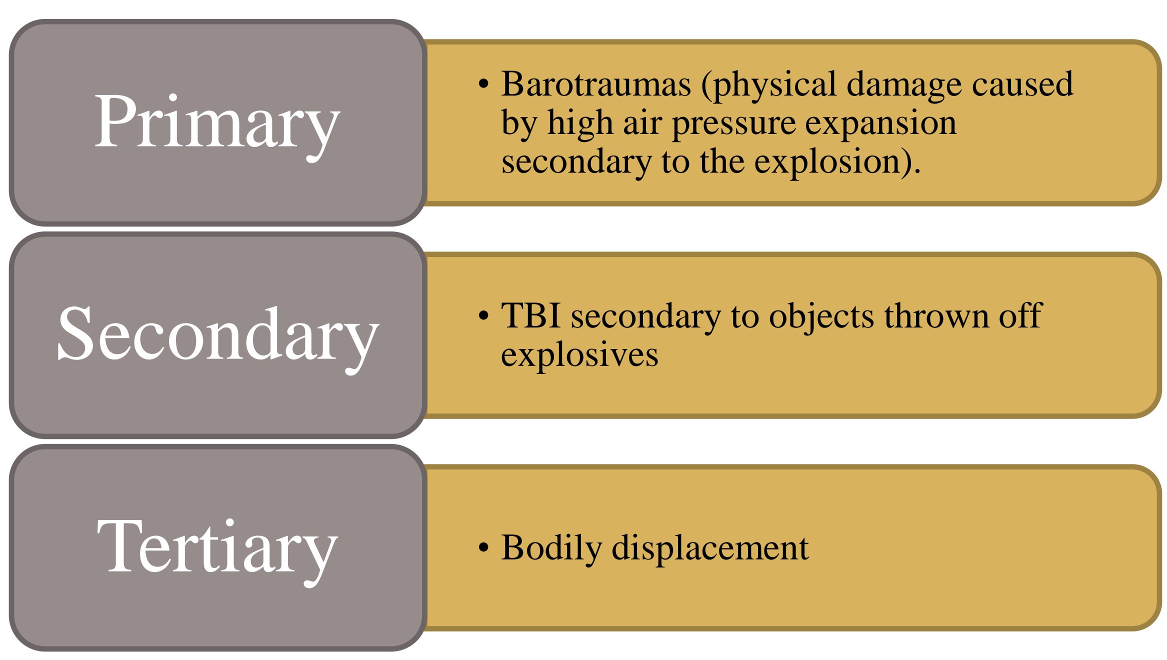
- A confused or disoriented state which lasts more than 24 hours
- Loss of consciousness for more than 7 days
- Memory loss for more than 7 days
- Structural brain imaging yielding normal or abnormal results

Penetrating TBI or Open Head Injury

- A head injury in which the dura mater is penetrated
- Can be caused by high-velocity projectiles or objects of lower velocity, such as knives, or bone fragments from a skull fracture that are driven into the brain

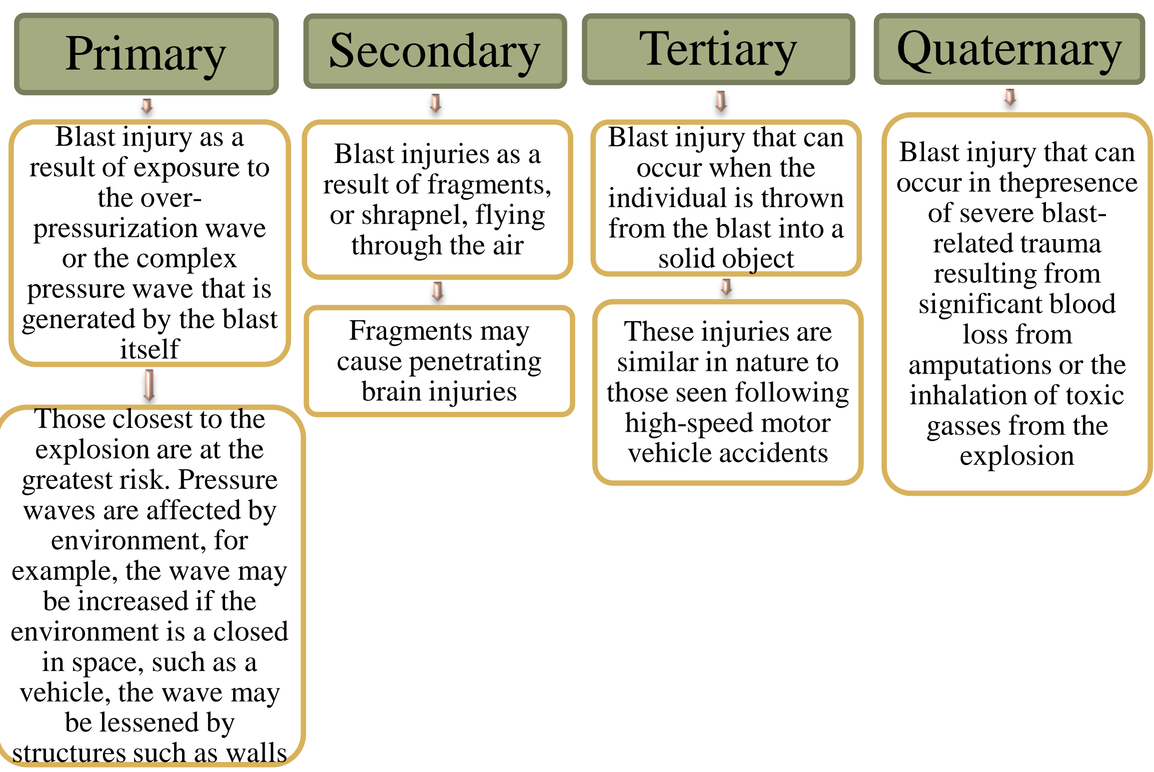
The majority of TBIs in the military context are blast related. There are three types of blast related TBIs according to Bettenhauser et al. (2012):

Figure 3.2



According to the Defense and Veterans Brain Injury Center (DVBIC) there are four types of blast related TBIs, as opposed to the three defined by Bettenhauser, et al. (2012):

Figure 3.3



TBI Sequelae

- Sequelae of a TBI may resolve quickly, within minutes to hours after the event, or may persist longer. Most signs and symptoms will manifest immediately following the injury, but following more severe injury, other symptoms or complications may be delayed for hours to days, or even many months.
- Symptoms generally fall into one or more of the three following categories:

Physical

- headache
- nausea
- vomiting
- dizziness
- blurred vision
- sleep disturbance
- weakness
- paresis/plegia
- sensory loss
- spasticity
- aphasia
- apraxia
- dysphagia
- balance disorders
- disorders of coordination
- seizure disorders

Cognitive

- Difficulties or impairments in:
- attention
- concentration
- new learning
- memory
- speed of processing
- panning
- reasoning
- judgment
- executing control
- self-awareness
- language
- abstract thinking

Emotional/Behavioral

- depression
- anxiety
- agitation
- irritability
- impulsiveness
- aggression

Terminology

External Forces

- Forces causing brain injury including the head being struck by an object, the head striking an object, the brain undergoing an acceleration/deceleration movement without direct external trauma to the head, a foreign body penetrating the brain, forces generated from events such as a blast or explosion, or other force yet to be defined.

Open vs Closed TBI

- A TBI resulting from something passing through the skull into the brain, such as a bullet or fragments from an explosion, is called a penetrating or open head injury. A TBI that results from either an object hitting something forcefully, such as the dashboard of a car, is referred to as a non-penetrating or closed head injury.

Alteration of Consciousness

- A state of confusion, disorientation, feeling mentally dazed, difficulty with mentally tracking events, responding to questions in a confused manner.

Posttraumatic Amnesia

- The time interval from when the person regains consciousness until he or she is able to consistently form memories for ongoing events.

Unique Considerations for OT

Facts/Statistics

Due to the unique nature of injury, veterans experience TBIs in a different fashion than the civilian population. Below are a few of the characteristics unique to veterans.

TBI has been called a "signature injury" of OEF/OIF

Sixty percent of patients with blast-related injuries seen at Walter Reed Army Medical Center have sustained a TBI.

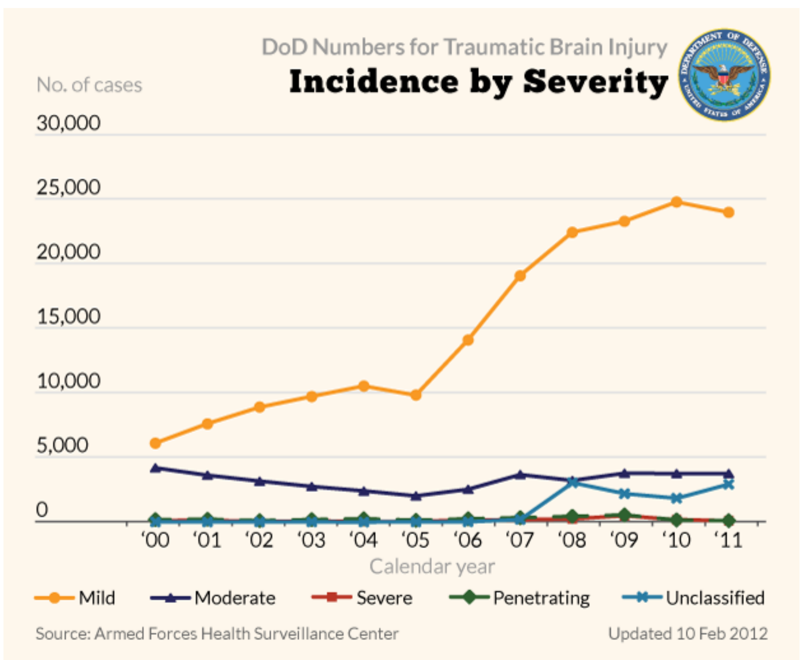
Veterans with TBIs are unique and require different care than civilians as veterans typically have more comorbid medical conditions and experience postconcussive symptoms for longer periods of time.

"Blast injuries occur almost daily in Iraq and Afghanistan as a result of rocket-propelled grenades, improvised explosive devices, explosively formed projectiles and land mines."

The majority of brain injuries are mild

Civilians typically experience postconcussive symptoms for a few months whereas veterans typically experience postconcussive symptoms for 18-24 months

Knowledge about combat related, and blast-related TBI is evloving, therefore, specific treatment for military related TBI is evolving, as well.



According to the DOD, the number of TBI cases, ranging from mild to severe, has increased by nearly 15,000 from 2000 to 2012.

Table 3.1

Due to the unique environment and mechanism of injury veterans' face, assessing TBIs has posed a number of questions by the VA.

Figure 3.4

Uncertainty about mechanism of injury when a service member does not experience a direct blow to the head from a blast.

Currently being researched by the DOD:

What happens to a service member's brain when its exposed to a blast with no direct head impact?

<u>Two Theories:</u>

1. Blast shock waves cause the skull to flex resulting in brain damage.
2. Blast pressure squeezes the thorax and causes a sudden vascular surge that goes to the brain, causing injury.

Below are issues associated with accurate assessment and treatment of TBIs in the veteran population.

Figure 3.5

Exposure to multiple potentially injurious events

Multiple symptoms common across various diagnoses, or symptoms commonly associated with stress

Delayed presentation for evaluation and treatment

By the time screening occurs at the VA, veterans memories have faded and may blend with other deployment experiences

VA screening for TBI in returning OEF/OIF veterans typically occurs anywere from several months to a year following deployment

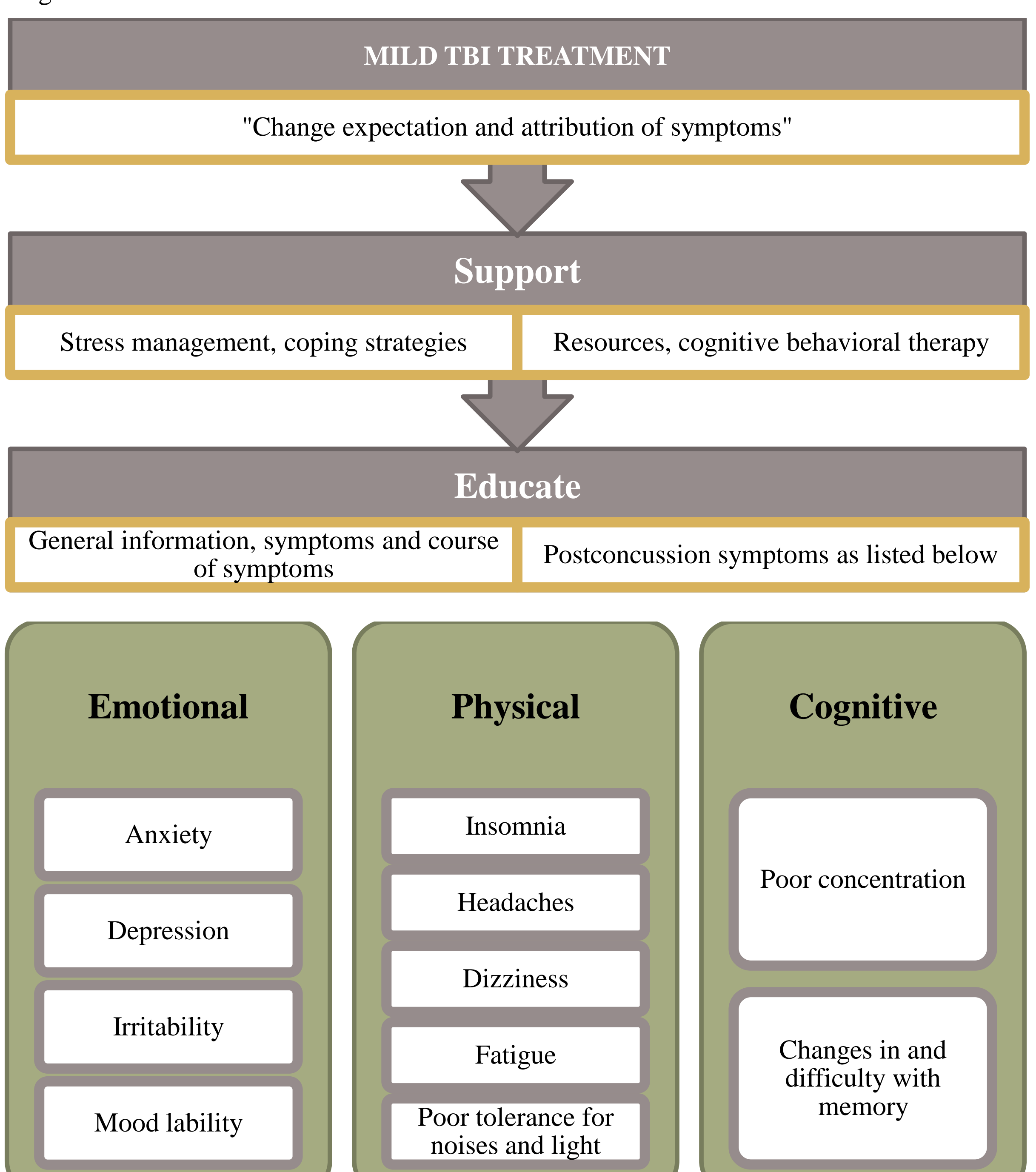
Assessments

Table 3.2

Title	General Information	Page Number
Brief Traumatic Brain Injury Screen (BTBIS)	Developed to, "determine the extent to which individuals require further clinician assessment of TBI" (Bettenhauser et al., 2012, p. 37).	111
Neurobehavioral Symptom Inventory-22 (NSI-22)	Originally developed for the civilian population, has recently been studied with regard to psychometrics in the Veteran population	113
Warrior Administered Retrospective Casualty Assessment Tool (WARCAT)	Developed at Fort Carson and is based off of the BTBIS	115
VA TBI Screening Tool (VATBIST)	Created by a workgroup of interdisciplinary VA TBI providers, primary care providers and representatives from DVBIC and from the VA Central Office Implemented in April, 2007 by the VA, as of January, 2012, nearly 400,000 veterans of OEF/OIF have been screened using VATBIST	116

Intervention Strategies to Consider

Figure 3.6



As most TBIs in the veteran population are a result of blast exposure, they may experience different patterns of sexual sequalae than civilians. Veteran's pre-injury sexual identities may be influenced by the military. For example, the military has different cultural norms which place importance on traditional gender roles, ideals of masculinity, group cohesion, hierarchical social structures, and potential mixed messages about sexual behavior and expression.

Due to the frequency of TBI and its comorbidities, specifically PTSD, veterans are at high risk for sexual difficulties, which negatively impact overall quality of life. Listed below are the ways a TBI can affect sexual functioning.

Figure 3.7

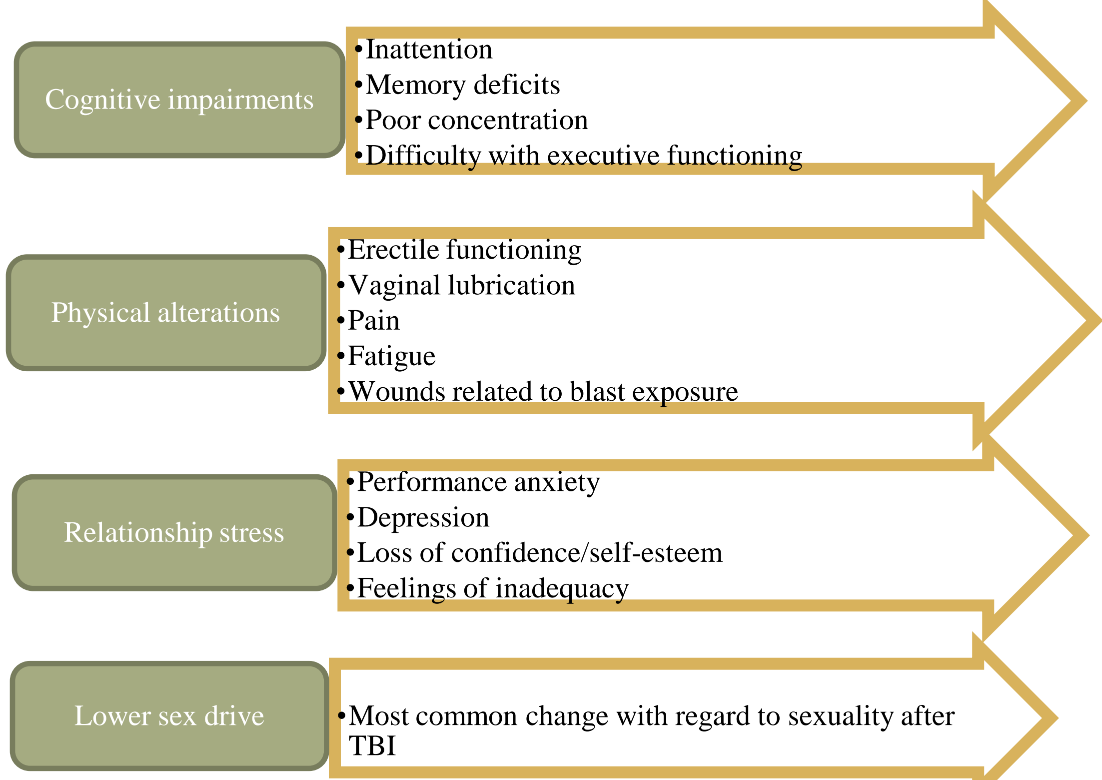
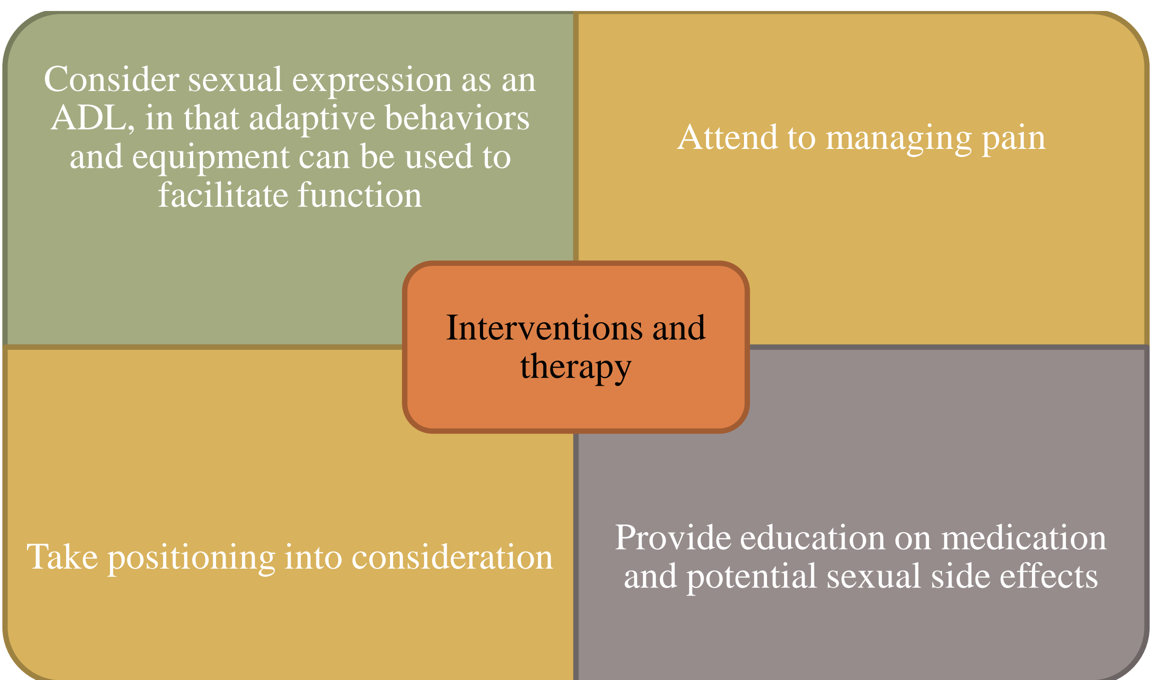


Table 3.3

How to approach sexuality with the veteran population:
• Ensure privacy • Establish rapport and a non-threatening, open environment • Validate sexual functioning concerns and affirm the goal of healthy sexual function • Take the military culture into consideration as well as the patient's beliefs about sexuality and disability • **Recommended Questions:** 1. When and where did you serve? 2. What were your duties? 3. Were you exposed to combat? 4. Were you wounded? 5. How have your wounds affected you?

Figure 3.8



Adapted from Cameron et al. (2011)

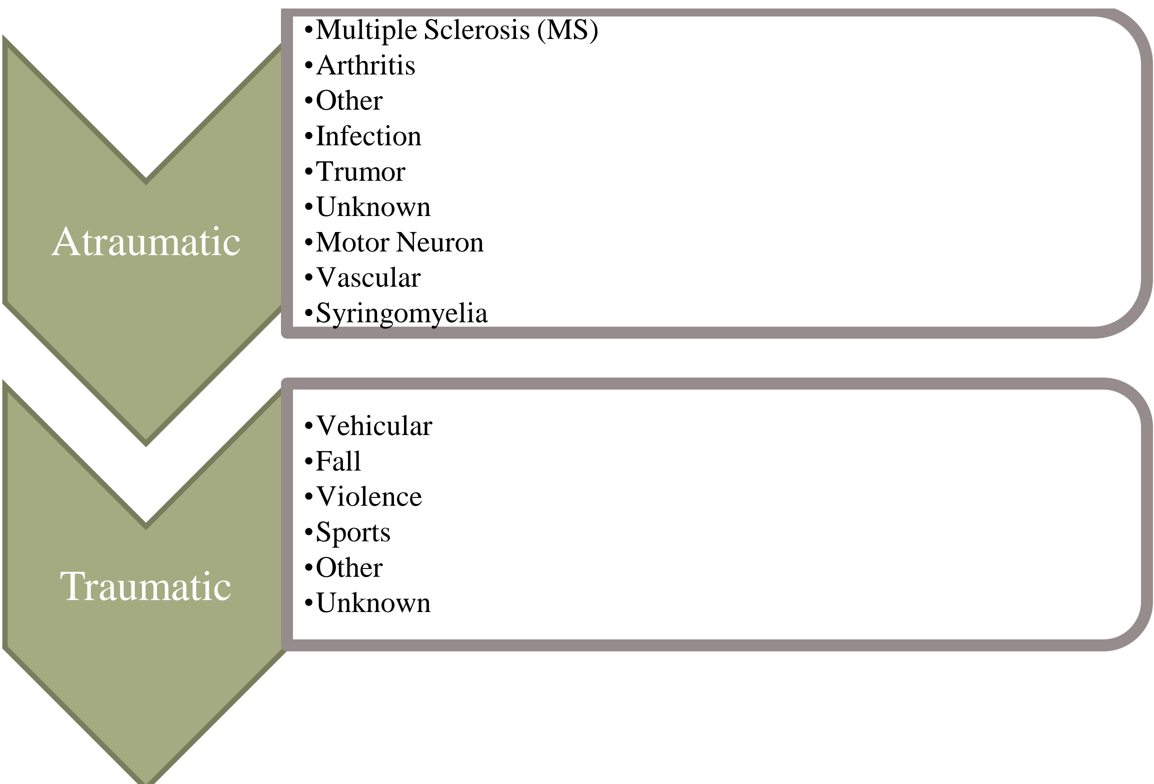
Spinal Cord Injury

Spinal cord injury (SCI) is a primary diagnosis seen within the veteran population due to past and current world conflicts. According to Curtin et al., (2012) one in every five individuals within the United States with a SCI are veterans. There are significant number of SCI within the veteran population and the VA has designated military specific terminology when addresses SCI. However, there are differences when addressing SCI within the veteran population due to the significant difference of comorbidities associated with SCI within the veteran population.

Definition/Etiology

SCI results in an injury to the spinal cord which is the primary pathway for transmission of information between the brain and peripheral nervous system. Injury to this particular area can cause considerable disruption of movement, sensation, and autonomic nervous system function (United States Department of Veterans Affairs, 2001). While many would suspect that combat injuries result in SCI within the veteran population, distinctly a majority of SCI within the veteran population occur similarly to those in the civilian world. Injuries resulting in a SCI are classified into two categories: atraumatic and traumatic.

Figure 3.9



There are several tracts of importance when trying to understand loss of neurological function after an SCI. The major spinal cord tracts and their functions that are of importance are as follows:

Table 3.4

Tract	Location Within Cord	Direction of Signals	Function
Corticospinal	Lateral & Anterior	Descending	Motor: precise control of movement
Spinothalamic	Anterolateral	Ascending	Sensory: pain and temperature
Dorsal Columns	Posterior	Ascending	Sensory: proprioception and vibration

- ✓ **Note:** Very rarely is one of the cords completed transected; therefore, SCI are often more complex in nature due to the variety of illness and complications that come with the injury.

Terminology

It is important to note that many of the following terms are not only used in the VA system, but in the private sector as well. Understanding common terminology associated with spinal cord injuries is essential as an occupational therapist in developing an accurate and effective treatment plan.

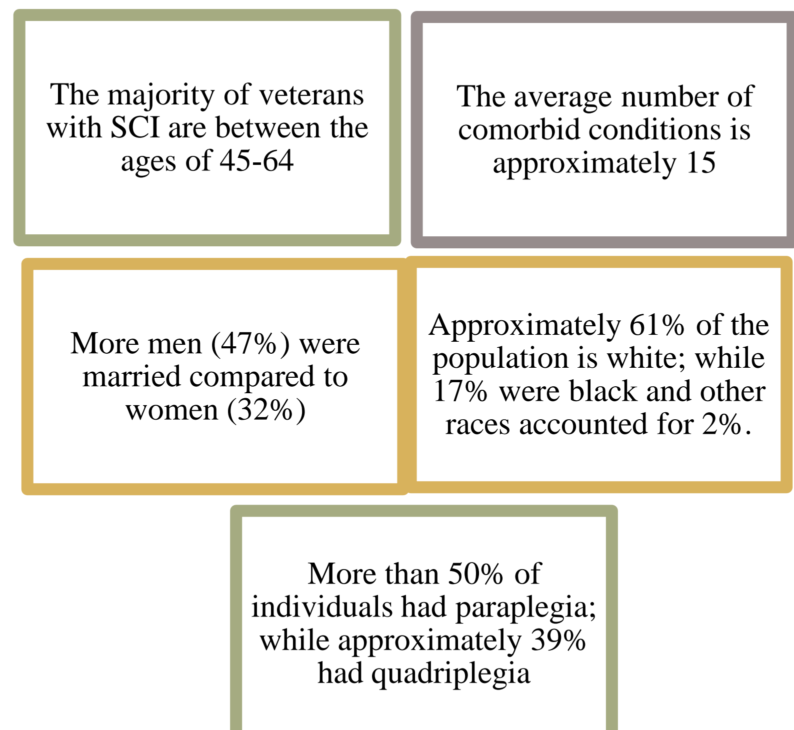
Table 3.5

Terminology	Definition
Upper Motor Neuron	Injury resulting from damage to the descending tracts with preservation of reflex spinal activity below the site of the lesion
Lower Motor Neuron	Injury resulting from damage to the cell bodies or axons of the lower motor neurons
Neurological Level	Refers to the most caudal level with normal function, rather than the first level with abnormal function
Central Cord Syndrome	Occurs with cervical level injuries, often in older individuals with preexisting cervical spinal canal narrowing Results from preferential damage to upper limb corticospinal tracts and has greater weakness in the upper limbs than in lower limbs
Brown-Sequard Syndrome	Results from asymmetric cord lesion and has greater proprioceptive and motor loss ipsilateral to the lesion, which contralateral loss of sensitivity to pain and temperature
Anterior Cord Syndrome	Results from occlusion of anterior spinal artery with unpredictable loss of motor function and of sensitivity to pain and temperature with preservation of proprioception
Conus Medullaris Syndrome	Injury to the sacral cord and lumbar nerve roots within the spinal cord and results in lower motor neuron findings, although sacral reflexes may occasionally be preserved
Cauda Equina Syndrome	Injury to the lumbosacral nerve roots within the neural canal resulting in areflexic bladder, bowel and lower limbs

Unique Consideration for OT Interventions

Facts/Statistics

It is estimated that approximately that there are up to 42,000 veterans with a SCI. This indicates that approximately one in every five individuals within the United States with a SCI are veterans (Curtin et al., 2012). These drastic numbers place an increased emphasis on occupational therapists understanding the complex nature of a SCI as well as the unique characteristics associated with SCI in the veteran population. Curtin et al. (2012) provides occupational therapists with a general understanding of who the SCI veteran population is. The characteristics identified are as follows:



There are a variety of comorbid diseases associated with SCI in the veteran population. The most common comorbid conditions according to Curtin et al. (2012) are as follow:

- Disease of the nervous system and sense organs, mainly consisting of eye disorders, hearing loss and abnormal involuntary movement. This category accounted for approximately 70%.
- Disease of the genitourinary system, mainly consisting of neurogenic bladder, urinary tract infection and impotence.
- Diseases of the digestive system, mainly consisting of disease of the teeth and supporting structures, neurogenic bowels, esophageal reflux and dental caries.
- Diseases of the musculoskeletal system and connective tissue, mainly consisting of disorders of the back, osteoarthritis, and pain in joints and shoulder region.

Additionally, the Department of Veterans Affairs (2001) has identified several comorbid diseases that are often accompanied with SCI in the veteran population. These comorbid diseases include but are not limited to:

- ✓ **Note:** The Department of Veterans Affairs (2001) identified several comorbid diseases affecting the veteran population with spinal cord injuries. Continue to page 77 for current strategies the VA is using to address such issues.

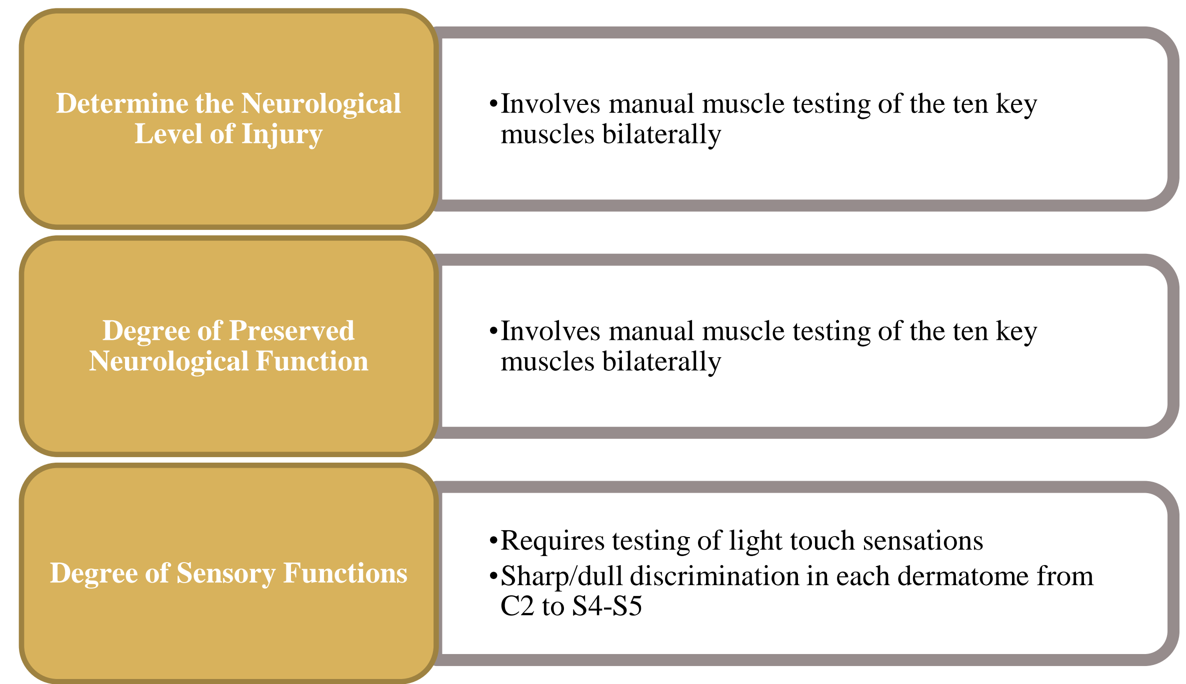
Assessments

In occupational therapy, assessment is a key and initial aspect of the therapy process. The key steps in assessment according to the Department of Veterans Health (2001) when addressing SCI are as follows:

- ✓ Determine the neurological level and whether the injury is complete or incomplete.
- ✓ Consider degree of sensory function.
- ✓ Evaluate the individual with complete injuries who may have:
    - Complete loss of sensory function below the lesion.
    - Complete loss of sensory function as determined on ASIA neurological examination.
- ✓ Evaluate individuals with incomplete injuries who may have:
    - Incomplete loss of sensory function, who has some degree of light touch or pinprick below the neurological level.
    - Sensory function is present but not normal.

Additionally, according to the United States Department of Veterans Affairs (2001), the primary tool used for neurological examinations for SCI was developed by the American Spinal Injury Association (ASIA). This standardized assessment determines the following:

Figure 3.10



According to the ASIA Scale, there are key muscles when completing a spinal cord assessment in order to determine level and preserved neurological functions. The key muscles are as follows:

Table 3.6

	Key Muscles In Neurological Testing to Determine Level & Preserved Neurological Functions	
Root	**Movement**	**Muscles**
C5	Elbow flexion	Biceps. Brachialis
C6	Wrist extension	Extensory carpi radialis longus and brevis
C7	Elbow extension	Triceps
C8	Finger flexion	Flexor digitorum profundus to middle finger
T1	Finger abduction	Abductor digiti minimi
L2	Hip flexion	iliopsoas
L3	Knee extension	Quadriceps
L4	Ankle dorsiflexion	Tibialis Anterior
L5	Long toe extension	Extensor Hallucis Longus
S1	Ankle Plantarflexion	Gastronemius and soleus

Taken from United States Department of Veterans Affairs, 2001

- ✓ **Note:** While determining the neurological level as well as preserved neurological functions of a veteran client, it is also essential you reflect back on basic characteristics of your client.

In order to address the aforementioned comorbid diseases including: pressure ulcers, obesity, Methicillin-Resistant Staphylococcus Aureus (MRSA), influenza and cross-cutting issues, the Department of Veterans Affairs (2001) identified the following intervention strategies.

Pressure Ulcers

- Define characteristics of the wound including: location, duration, appearance, odor and exudate.
- Determine stage of pressure ulcer using the uniforn classification system recommended by the U.S. Department of Health and Human Services, Treatment of Pressure Ulcers Guideline Panel.
- In order to evaluate pressure ulcer healing, the VA SCI Centers are implementing the Pressure Ulcer Management Tool (PUMT). Currently, there are no publications on the PUMT; however, the Department of Veterans Affairs states that this assessment will provide an evidence-based outcome tool to improve communication among healthcare professionals within the VA system.

Obesity

- Obesity is additionally a significant issue among the veteran SCI population affecting approximately two-thirds of individuals (VA Health Care, 2012). Keeping a close watch on the nutritional intake of obese veterans is imperative to the recovery process and overall health and well-being.
- SCI veterans should participate in weight management strategies, such as physical activities and dietary managment to treat obesity.
- As occupational therapists we should be aware of dietary resources available for obese SCI veterans.
- The Spinal Cord Injury Quality Enhancement Reserach Initiative has partnered with the VA National Center for Health Promotion and Disease Prevention to conduct a systematic assement of current weight managment treatments.

MRSA

- MRSA is a disease the veteran SCI population is at an increased risk of obtaining, approximately ranging from 8-30%. Furthermore, the VA has developed a toolkit to educate veterans with SCI on MRSA. This toolkit is currently being implemented in the VA SCI Centers across America.

Influenza

- The veteran population with SCI is at high risk from respiratory problems due to influenza. Currently, the goal at VA SCI Centers requires 85% of their healthcare workers to receive an influenza vaccination in order to reduce the chances of clients obtaining influenza (VA Health Care, 2012).
- Currently a study is under development to facilitate the use of novel evidence-based implementation strategies to improve influenza vaccination rates amont VA healthcare workers to reduce the spread.

Cross-Cutting Issues

- Cross-cutting issues are a veterans inability to access care and are often due to mobility impairments and the need for specialized equipment.
- The spinal cord injury center contains educational materials, consumer guides and other evidence-based tools to assist with veterans inabilty to access care.

Intervention Strategies to Consider

While facts/statistics associated with SCI were previously stated on page 71, it is important to place emphasis on differences between male and female veterans with a SCI when determining intervention strategies. While a small percentage of veterans with a SCI are women; the women veterans with a SCI face different challenges than men. A few key aspects located below will assist you in remembering to address gender differences during interventions.

- ✓ Providers may want to provide special attention to the social support surrounding women veterans with an SCI, or the lack thereof.
- ✓ Women with an SCI were younger than their male counterparts; therefore, had a different distribution of medical diagnoses and will more likely have different areas of occupation to address.
- ✓ Occupational therapy interventions should be tailored to veteran women with SCI in order to meet their specific medical needs.

Note: While addressing gender differences among the veteran population with a SCI, it is important to also realize that a majority of SCI veterans are between the ages of 45-64, you should be prepared to work with the aging population and the complications that arise with age.

While addressing gender differences among the veteran SCI population is essential, you may also use various techniques to assist with common comorbidities such as the following:

- Education and use of assistive devices to improve function
- Assist with improving range of motion
- Teaching adaptive and compensation techniques for functional impairments
- Assist with community and home environment assessments
- Address all psychosocial issues related to injury

Combat Injuries

While most health care providers in the VA have experience working with combat related injuries, a civilian health care provider may not have an understanding of the causes of combat related injuries as well as what types of injuries may occur. Combat wounds are complex and devastating. Today the media has placed great emphasis on addressing and understanding specific injuries such as traumatic brain injury, spinal cord injury and post-traumatic stress disorder among soldiers and veterans; however, there are still a significant amount of combat injuries resulting in amputations, burns and wounds.

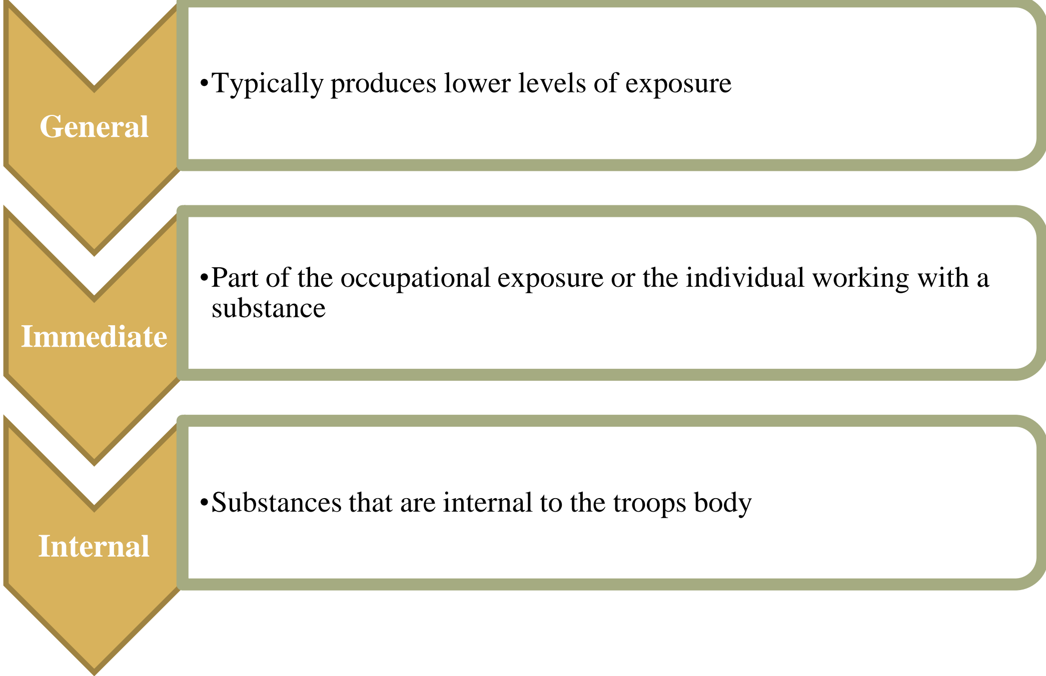
Definition/Etiology

It is imperative that occupational therapists who are working with the veteran population have an understanding of how combat injuries occur due to both the physical and psychological damage a combat related injury can have. Combat injuries result from various reasons including:

Taken from Taylor & Jeffery, 2009

While a majority of combat injuries result from fragments (62%) and cause damage to primarily the soft tissue, as well as extremities, which may result in amputations, environmental exposures also attribute to combat injuries. Environmental exposures that may contribute to a decline in health among veterans or military personnel include: natural sources or sources influenced by human activities. Natural sources and sources influenced by human activities are identified according to three categories of proximity such as general, immediate, and internal. Categories of proximity are listed to the below.

Figure 3.11



- ✓ **Note:** Specific examples of natural sources and sources influenced by human activities are located on the following page.

Natural Sources

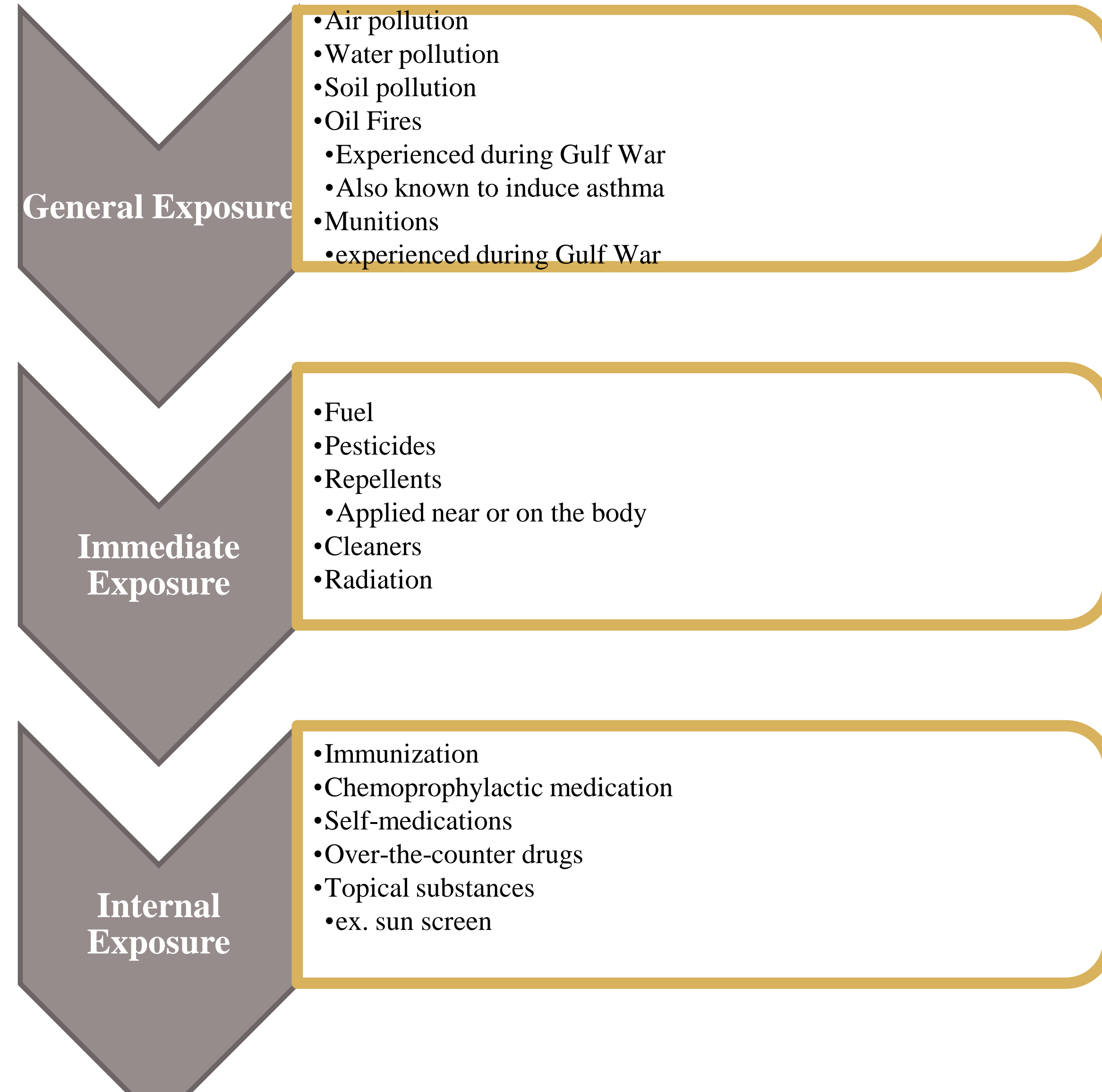
General Exposure	Immediate Exposure	Internal Exposure

•Temperature variation (cool to cold at night to extremely hot in the day)
•Solar Radiation
•Wind
  •High winds can create dust problems or sand storms
	•Arthopods that are either venomous or serve as vectors of infectious disease
	•Infectious agents through airborne or direct contact
		•Food and beverages
		  •Often troops consume food or beverages that may be contaminated or lead to disease

Taken from United States Department of Veterans Affairs, 2009

Sources Influenced by Human Activities

Figure 3.12



Terminology

Currently, today's gun industry in the United States has seen a shift towards selling militarized firearms to civilians (Violence Policy Center, 2011). Militarize means to give a military character to something; in this case it is guns (Violence Policy Center, 2011). While the United States firearm industry is promoting and selling militarized firearms, the firearms are not identical to military weapons. There are still significant differences between military and civilian firearms (Violence Policy Center, 2011). Military firearms are known for their high capacity, high energy and high legality all of which is necessary during wartime (Violence Policy Center, 2011). Additionally, military firearms create far more complex injuries than civilian firearms.

Multiple causes of wounding are a major difference between the military and civilian world. Civilian injuries often are not as complex or devastating to the individual. Furthermore, combat injuries can occur from multiple causes including: environmental exposures, gunshots, grenades, improvised explosive devices (IED), landmines, and suicide bombings. In today's wars, IED's are most often the choice of weapon used by the opposing forces. IEDs are destructive devices from homemade, commercial, or military explosive materials that are deployed in ways other than conventional military means (Belmont, Schoenfeld & Goodman, 2010).

IEDs are often used to destroy, disfigure, or interdict military assets in the field (Belmont et al., 2010). IEDs have immediate health effects due to the high pressure explosions. Injuries often associated include:

- ✓ **Overpressure Damage**
  - o Includes damage to the lungs, ears, abdomen and other pressure-sensitive organs.
  - o Blast Lung injury
    - ▪ The most extreme pressure injury and considered the leading cause of death for initial survivors.
- ✓ **Fragmentation Injuries**
  - o Caused by projectiles through by the blast
  - o This may include the bomb, shrapnel or flying debris, all of which penetrate the body causing damage
- ✓ **Impact Injuries**
  - o Caused when the blast throws an individual into another object
  - o This results in fractures, amputation and trauma to the head and neck
- ✓ **Thermal Injuries**
  - o Results in burns to the skin, mouth, sinus and lungs
- ✓ **Other Injuries**
  - o May include exposure to toxic substances, crush injuries, asthma, congestive heart failure and much more

Taken from United States Department of Homeland Security, 2009

While multiple causes of wounds are a major difference between military and civilian injuries, there are many differences that affect the type of injury, as well as care provided. Military injury differences include but are not limited to the following:

- High energy & high lethality of wounding agents
- Predominance of penetrating injuries
- Persistent of threat in wartime settings
- Severe resource-constrained environment
- Delayed access to definitive care

Taken from Champion et al., 2003

✓ For definitions regarding military injury differences continue to page 89.

High Energy & High Lethality of Wounding Agents

- High energy and high legality of wounding agents is an important aspect in identifying the differences between civilian injuries and combat injuries. The types of weapons used during war have a significantly different impact than weapons used in the civilian world.
- Weapon systems during wartime include:
  - individual and crew served weapons
  - aircraft weapons
  - air defense artillery
  - indirect fire systems
  - nuclear weapons
  - biological weapons
  - chemical defense weapons

Persistent Threat During Wartime & Severe Resource Contstraint Environments

- Persistence of threat during wartime and severe resource constraint environments may be due to the ever changing nature of combat. Over the decades the concepts of wartime battle have changed dramatically. Today's nature of combat is described as asymmetric low density, very remote or disbursed.
- Asymmetric warfare refers to the discordance between opposing forces in terms of tactics and weapons. An example of this is guerilla war or where Special Forces may be required during an encounter. Most often the persistent threat comes from the soldiers fighting in what is known as a "three-block war."
- A three-block war consists of soldiers providing humanitarian support in one aspect of the city, conducting peacekeeping operations in another part of the city, and fighting a lethal battle in a third part of the city.

Taken from Champion et al., 2003; United States Army, 2012

Predominance of Penetrating Injury

- Predominance of penetrating injury or the distribution of wounds is significantly different than civilian injuries. Explosive injuries, which are common in during military wartime, tend to simultaneously affect multiple body regions. Affecting multiple body regions is a significant difference when compared to civilian wounds.
- See figure 3.13, page 91 for details regarding primary site of injury

Delayed Access to Definitive Care

- Delayed access to definitive care has been a long time issue during wartime. As far back as Vietnam, where only 2.6% of soldiers that made it to a surgical field died, which indicates that despite helicopter evacuations, the majority of deaths occurred in the field of action .
- Today there are more medical precautions and units stationed throughout wartime settings. The military surgical strategy today focuses more on damage control rather than definitive repair.
- Injuries sustained in today's wars were un-survivable in previous wars; however, with the new military medical strategies far more soldiers are surviving and returning home to receive definitive care.

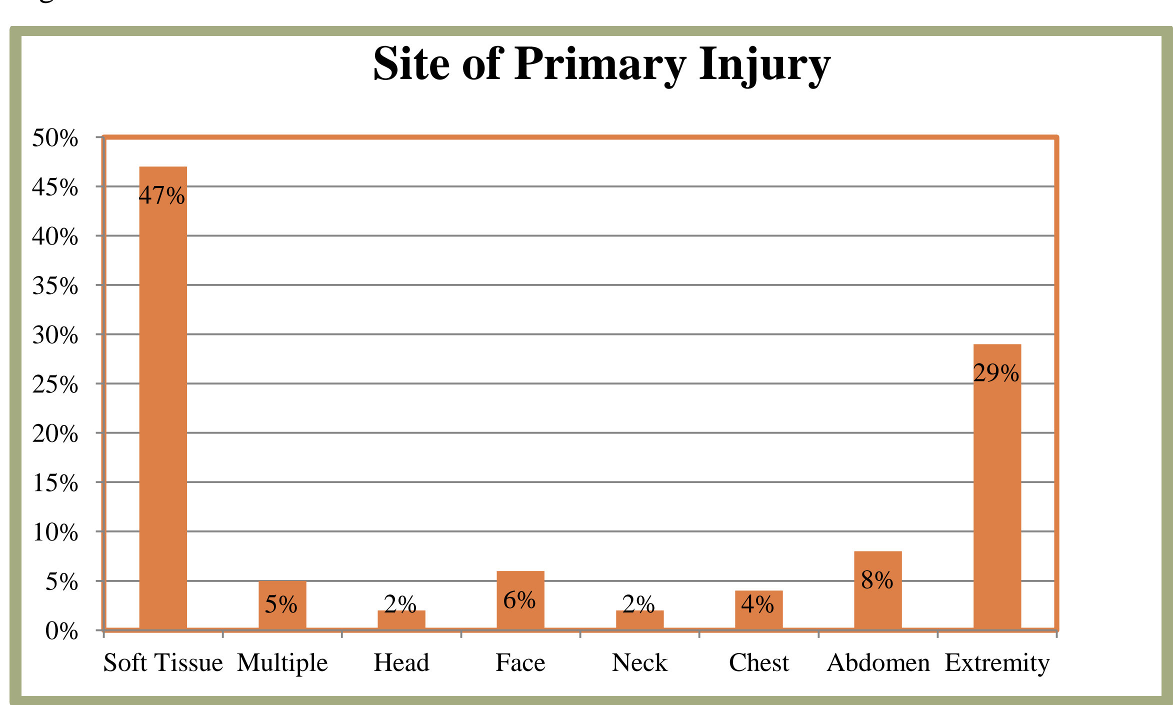
Taken from Gawande, 2004

Unique Considerations for OT

Facts/Statistics

Civilian wounds are primarily the results of gunshots, which often do not have the same predominance of penetrating injury as do wartime weapons. Predominance of penetrating injury or the distribution of wounds is significantly different than civilian injuries. Explosive injuries which are common in during military wartime tend to simultaneously affect multiple body regions. Affecting multiple body regions is a significant difference when compared to civilian wounds. Gun used in civilian injuries typically have a single entrance and exit wound, generally only affecting one body region (Belmont et al., 2010; Champion et al., 2003). The primary sites of injuries of the veteran population are as follows:

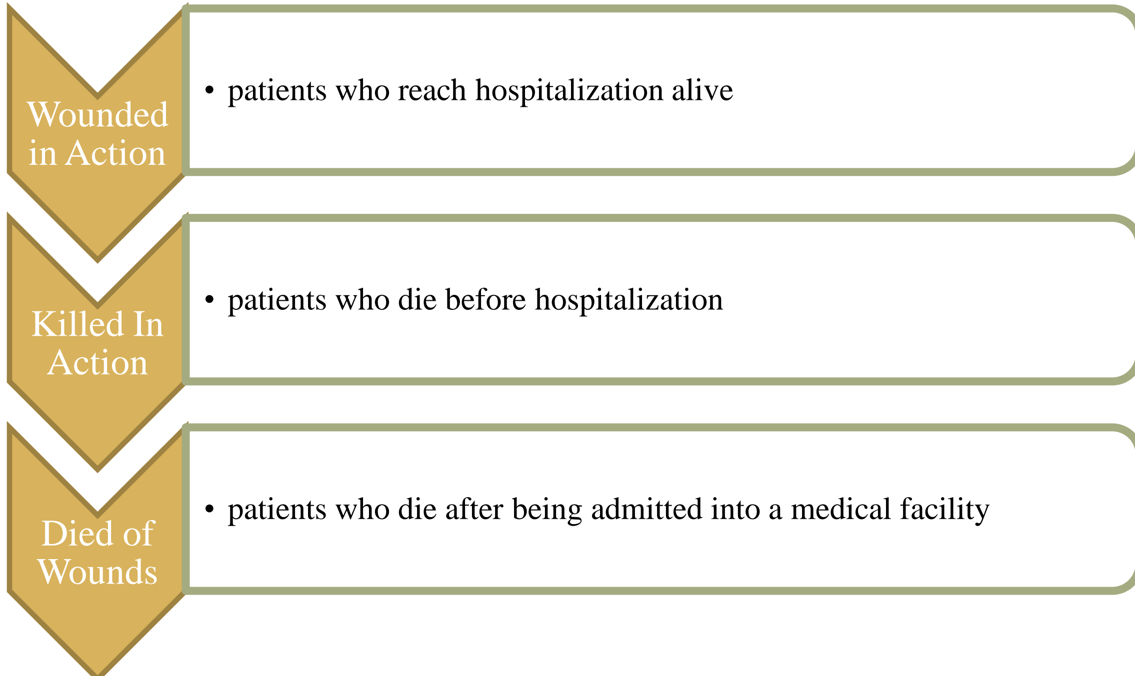
Figure 3.13



Taken from Champion et al., 2003

✓ **Note:** In today's war, as well as future wars, the changes in wounding patterns is contributed to the enemy's unconventional tactics as well improved body armor (Belmont et al., 2010).

Most often the primary site of injury is the soft tissue, with extremity injuries rated as the seconded highest injury. Extremity injuries often result in amputation and are still a major injury in today's war. As of 2010, there were approximately 2,000 services members with amputations as a result of the OIF, OEF and unaffiliated conflicts (Fischer, 2010). A majority of amputations consisted of major limb amputations, while partial hand or foot accounted for the least. According to the Department of Veteranss Affairs (2002), battle injuries are classified into three categories:

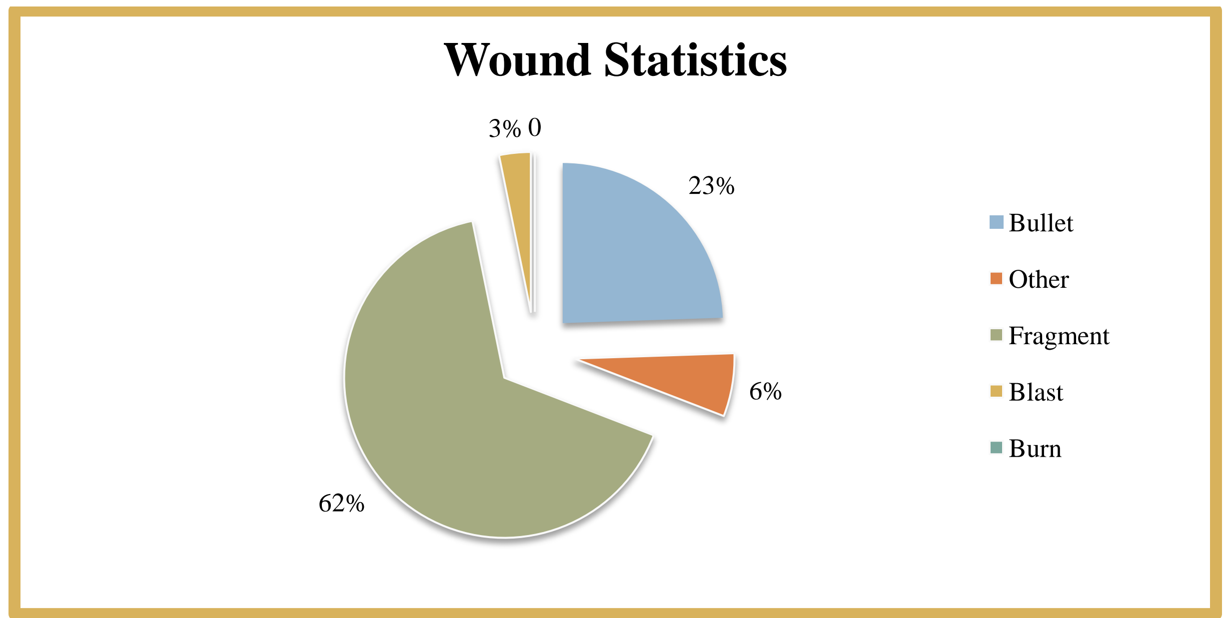


Amputations continue to have a high mortality rate for veterans during wartime. However, with an increase in response time on the battlefield, more and more soldiers are transferred to a hospital to receive treatment (Department of Veterans Affairs, 2002). Amputations are referred

to as wounded in action, due to the fact there are far more advanced limb salvage techniques used on the battlefield (Department of Veterans Affairs, 2002).

Furthermore, the distributions of such injuries vary based on the location of battle, tactics, and changes in weapons used during warfare. Statistics related to combat related injuries are as follows:

Figure 3.14



Taken from Champion et al., 2003

Assessments

The primary focus when assessing and addressing combat injuries is pain management. Due to the severe and multiple injuries associated with combat injuries, pain assessment may be challenging. According to Clark et al., (2007) pain-related problems accounted from 42% in physical impairments and 34% in emotional function. Additionally, most clients who are suffering from a combat injury also have associated diagnoses, such as TBI or PTSD. There currently are no recommended pain assessments to be used with combat injuries as pain assessments are not reliable or valid due to the nature of physical and psychological implications associated within the veteran population. Recommended pain scales or assessments include:

- ✓ Simple Pain Scales
- ✓ Faces Scale
- ✓ If unresponsive or cognitive deficits, you will want to rely on observations and previous experiences

- ✓ Use a combination of assessments from various diagnoses such as TBI or PTSD as most individuals with combat injuries, such as burns and wounds, often have a brain injury or some sort of psychological diagnoses associated with.

Intervention Strategies to Consider

Being aware of natural environmental exposures is important when working with the veteran population. As an occupational therapist addressing the environmental factors influencing participation in occupations, and being aware of either natural or sources by human activities, it is important to determine the most appropriate environment for the therapy process. When addressing combat injuries within the veteran population there are many significant factors an occupational therapist must take into consideration. These factors include but are not limited to:

- ✓ Occupational history
- ✓ Multiple causes of combat injuries
- ✓ Primary site of injury or predominance of the injury
- ✓ The psychological aspects associated with the injury/injuries

Once the occupational therapist has identified some of the key factors, it is essential to determine how to treat the often complex and unique military wounds. Most often military wounds are greatly contaminated from the environment, and soldiers only able to maintain basic hygiene due to the severe resource restricted environment (Taylor & Jeffery, 2009).

Current management of military wounds uses a holistic approach and includes: management of pain, early attention to nutrition, microbiology, photographing wounds, debridement, dressings, and fasciotomies. In regards to occupational therapy, an occupational therapist would assist in management of pain, be able to identify early nutritional needs, photographing wounds, dressings, and debridement on the battlefield; however, addressing these issues are still important off the battlefield.

- ✓ It is important to always consider psychosocial aspects of an injury, as well. Psychosocial aspects should be implemented as part of the treatment plan when working with the veteran population due to the trauma associated with their injuries.

Management of Pain

- Altering occupations to address pain

Nutritional Needs

- Often due to the severe nature of soldiers injuries, the nutritional needs are not addressed immediately
- It is important to be aware of and monitor nutritional status of the clients

Photographing Wounds

- Digital photographing will provide best documentation for military wounds
- Additionally, digital photographs avoid distrubing dressings, which can be painful

Debridement

- Considered the fundamental aspect in military wound care
- Occupational therapists should utilize tehcniques including: mechanical debridement using forceps, cotton tipped applicators and wet to dry dressings, and pulsed lavage (AOTA Commission, 2012)
- Occupational therapists should be able to utlize sharp debridement tools such as a scalpel or scissors to remove necrotic tissue as well as enzymatic agents for debridement and physical agent modalities to assist in wound debridement (AOTA Commission, 2012)

Dressings

- Occupational therapists should utilize techniques such as: application of clean dressings, application of wound closure strips, monitoring wound status, and using Negative Pressure Wound Therapy (NPWT), (AOTA Commission, 2012)
- NPWT dressings are currently being examined
- NPWT is a form of gauze connected to a vacuum suction device, which allows for clean and close wound management, while addressing inflammation (Taylor & Jeffery, 2009)
- NPWT may act as a splint; therefore, no further splinting is necessary

✓ **Note:** Most of these intervention strategies are applicable for soldiers returning from war; however, dealing with veterans may require similar interventions and it is important to be aware of such treatments.

Post-Traumatic Stress Disorder

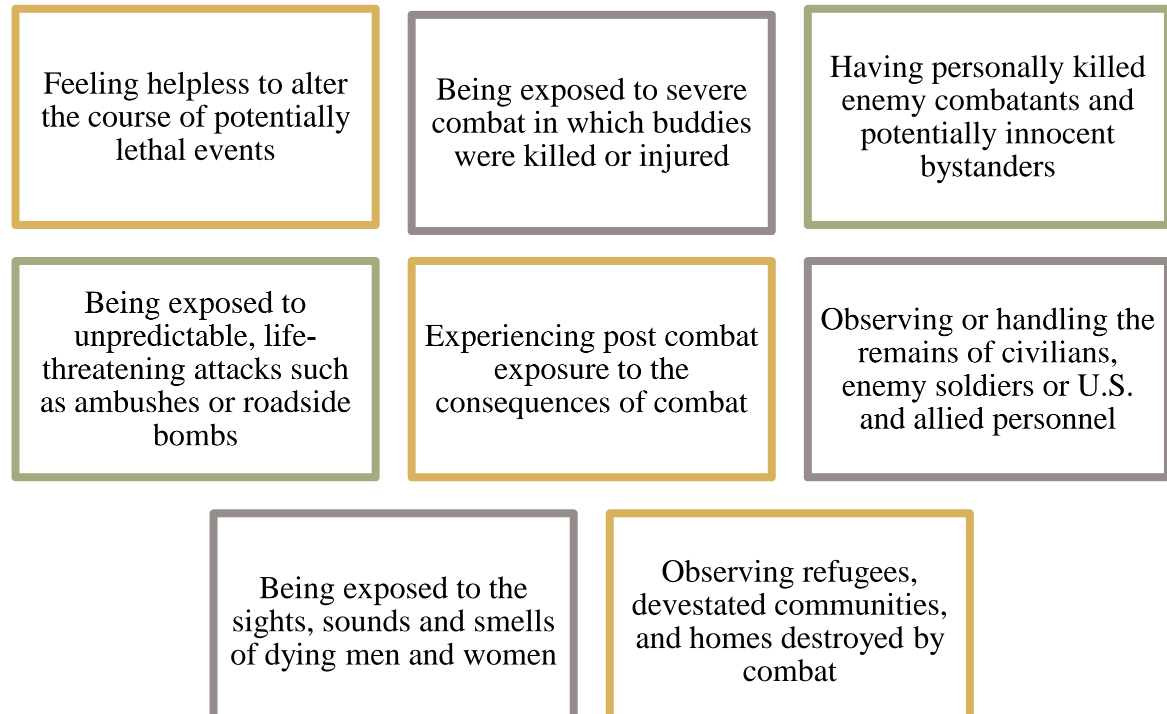
Post-traumatic stress disorder (PTSD), is one of the most common diagnosis seen in the veteran and military population. Often, if a veteran has experienced an injury, such as SCI, TBI or a different combat related injury, they are likely to have PTSD from the events leading up to, and including their injury. Due to the high rate of PTSD, it is imperative that a therapist working with a veteran, be it in a mental health or physical rehabilitation setting, be aware of the unique nature of PTSD in the military. In this diagnostic section, special attention will be given to a new preventative measure to mental health being taken by the DOD and VA called Combat Stress Control teams (CSC). Similarly to the TBI section, a list of military specific assessments will also be provided.

Definition/Etiology

Veterans experience stress in the form of increased likelihood of physical injury, combat guilt, mental health treatment resistance, and deployment to a warzone promotes the chronic expectation of encountering a hostile situation, limited time to process trauma and repeated exposure to trauma. According to Coll, Weiss and Yarvis (2011), “The set of stressors associated with the war zone experience are unlike that of any other occupation in civilian society,” (p. 491).

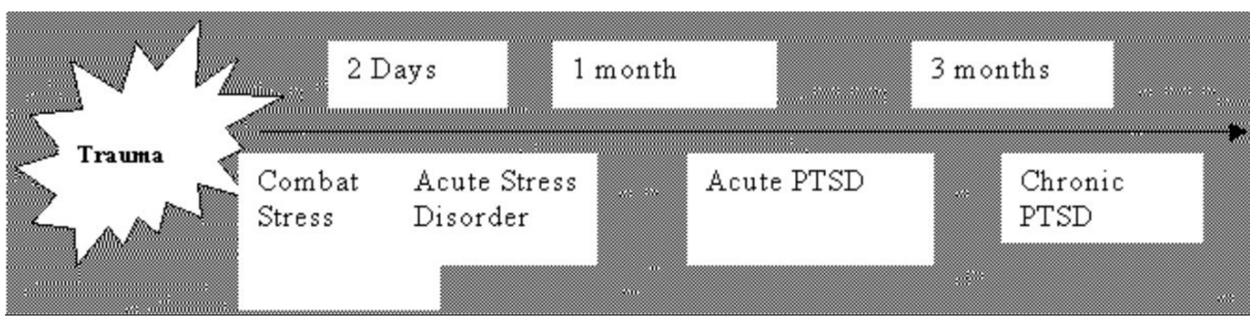
Types of military specific stressors			
Environmental: extreme weather conditions, loud noises from expolsions, toxic agents	**Psychological and physical:** bodily injury, dehydration, sleep deprevation	**Cognitive:** concussion, mild TBI and head trauma from blasts suchs as IEDs	**Emotional:** sensory overload, insecurity, constant state of fear

Below are further examples of military specific stressors:



Below is a stress reaction timeline for PTSD as outlined by the VA.

Figure 3.15



(Taken from www.va.gov)

Terminology

While the majority of PTSD related terminology is equivalent to what would be seen in a civilian setting, there are a few military specific terms, listed below.

Combat and Operational Stress Reaction:
Acute reactions to a high-stress or combat-related event.
(va.gov)

Resilience:
Positive adaptation despite adversity; symptom free functioning following trauma

Prior Stressors:
Exposure to traumatic events before deployment. For example physical assault, previous combat duty, or domestic violence.

Deployment Social Support:
Amount of assistance and encouragement in the war zone from the military general.

Perceived Threat:
Fear for one's safety and well being in a war zone, especially as a response to poetntial exposure to circumstances of combat.

Combat Experiences:
Exposure to stereotypical warfare experiences such as firing a weapon, being fired on, witnessing injury and death; refers to objective experiences, does not include personal interpretations of the events or circumstances

Postdeployment Social Support:
The extent to which family, friends, coworkers, employers and community provide emotional sustenance and assistance.

Postdeployment Stressors:
Exposure to stressful life events after deployment, such as MVAs, death or serious illness of a relative, reestablishing family, community and work roles, legal or financial difficulties, and divorce.

Aftermath of Battle:
Exposure to the consequences of combat, in cluding handling human remains, dealing with POWs, observing devistated communities and homeless refugees.

Unique Aspects of the Veteran Population

Facts/Statistics

Below is a table of exposure to traumatic events experienced in Iraq and Afghanistan by members of the Army and Marines.

Table 3.7

Deployment Region	Division	Seeing dead bodies	Being shot at	Being attacked or ambushed	Receiving rocket or mortar fire	Knowing someone who was killed or seriously injured
Iraq	Army	95%	93%	89%	86%	86%
Iraq	Marines	94%	97%	95%	92%	87%
Afghanistan	Army	39%	66%	58%	84%	43%

(Taken from www.va.gov)

Assessments

Title	General Information	Page Number
Brief Checklist of Traumatic Symptoms	Used to determine need for further testing	120
PTSD Checklist-Military (PCL-M)	17-item self-report measure; takes 5-10 min. to complete	122
Mississippi Scale for Combat Related PTSD (M-PTSD)	35-item self-report measure	124
Primary Care PTSD Screen (PC-PTSD)	Four question screening tool	129
VA Major Depressive Disorder Clinical Practice Guidelines for Depression PTSD Screen (DRRI-2)	Four item screening tool	130
PTSD Checklist- Stressor Specific Version (PCL-S)	17-item self-report measure; takes 5-10 min. to complete	131

Below is a table of what the VA considers to be components of a functional PTSD assessment:

Table 3.8

Assessment Work	• Is the person unemployed or seeking employment? • If employed, any changes in productivity? • Have co-workers or supervisors commented on any recent changes in appearance, quality of work, or relationships? • Tardiness, loss of motivation, loss of interest? • Been more forgetful, easily distracted?
School	• Changes in grades? • Changes in relationships with friends? • Recent onset or increase in acting out behaviors? • Recent increase in disciplinary actions? • Increased social withdrawal? • Difficulties with concentration and short-term memory?
Marital & Family Relationships	• Negative changes in relationship with significant others? • Irritable or easily angered by family members? • Withdrawal of interest in or time spent with family? • Any violence within the family? • Parenting difficulties? • Sexual function difficulties?
Recreation	• Changes in recreational interests? • Decreased activity level? • Poor motivation to care for self? • Sudden decrease in physical activity? • Anhedonia?
Housing	• Does the person have adequate housing? • Are there appropriate utilities and services (electricity, plumbing, other necessities of daily life)? • Is the housing situation stable?
Legal	• Are there outstanding warrants, restraining orders, or disciplinary actions? • Is the person regularly engaging in or at risk to be involved in illegal activity? • Is patient on probation or parole? • Is there family advocacy/Dept. of Social Services (DSS) involvement?
Financial	• Does the patient have the funds for current necessities, including food, clothing, and shelter? • Is there a stable source of income? • Are there significant outstanding or past-due debts, alimony, child support? • Has the patient filed for bankruptcy?

	• Does the patient have access to healthcare and/or insurance?
Unit/Community Involvement	• Does the patient need to be put on profile, MEB, or limited duty? • Is patient functional and contributing in the unit environment? • Is there active/satisfying involvement in a community group or organization?

Taken from www.va.gov

Intervention Strategies to Consider

Military Specific Preventative Measures for PTSD according to Coll et al. (2011)

- ✓ Combat Stress Control Teams (CSC)
  - ✓ Uses the "PIES" principle (Proximity, Immediacy, Expectancy, and Simplicity)
  - ✓ Originally designed in WWI as an early intervention program
  - ✓ Currently being used in the military to provide "front-line behavioral health care for military personnel" (p. 494).
    - ✓ Has been proven to be effective in Desert Storm, Operations Desert Shield, in Somalia
    - ✓ Is currently being used by the Army and Navy with service members involved in both OEF and OIF
  - ✓ CSC teams consist of:
    - ✓ Behavioral science specialist
    - ✓ Social work officer
    - ✓ Psychiatric nurse officer
    - ✓ Psychiatrist
    - ✓ **Occupational therapy officer!**
  - ✓ CSC teams promote:
    - ✓ Mental stability and mission-oriented combat force
  - ✓ CSC teams use the following interventions:
    - ✓ Consultations with command (such as commanding officers)
    - ✓ Preventative resiliency skills training
    - ✓ Individual therapy
    - ✓ Anger management skills
    - ✓ Stress management skills
    - ✓ Substance abuse counseling
    - ✓ PTSD group therapies
  - ✓ CSC teams goal:
    - ✓ Return the service member back to duty
      - ✓ According to a recent study, return to duty rates from 2004 indicate that 98% of soldiers treated by a CSC team returned to duty and assumed their combat zone duties.

Combat and Operational Stress Reaction (COSR), intervention, according to the va.gov:

Table 3.9

Reassure	normalize the reaction the client is having
Rest	from work or combat
Replenish	bodily needs, such as sleep, food, water, hygiene, ect.
Restore	confidence using purposeful activities and through communication
Retain	contact with fellow soldiers within and outside of one's unit
Remind/Recognize	the emotion of the reaction, for example suicidal thoughts or behaviors

Section IV:

Military Specific Assessments

Military Specific Assessments

The following section provides information regarding military specific assessments previously discussed and identified in Section three: Military Priority Medical Conditions. The information does not provide detailed instructions on how to implement the assessment; however, does provide you with a basic understanding of what the assessment looks like and how it might be used.

TBI Assessments

Brief traumatic brain injury screen (BTBIS)

1. I have symptoms of re-experiencing or reliving the traumatic event:
    - Have bad dreams or nightmares about the event or something similar to it
    - Behave or feel as if the event were happening all over again (this is known as having flashbacks)
    - Have a lot of strong or intense feelings when I am reminded of the event
    - Have a lot of physical sensations when I am reminded of the event (for example, my heart races or pounds, I sweat, find it hard to breathe, feel faint, feel like I'm going to lose control)
2. I have symptoms of avoiding reminders of the traumatic event:
    - Avoid thoughts, feelings, or talking about things that remind me of the event
    - Avoid people, places, or activities that remind me of the event
    - Have trouble remembering some important part of the event
3. I have noticed these symptoms since the event happened:
    - Have lost interest in, or just don't do, things that used to be important to me
    - Feel detached from people; find it hard to trust people
    - Feel emotionally "numb" or find it hard to have loving feelings even toward those who are emotionally close to me
    - Have a hard time falling or staying asleep
    - Am irritable and have problems with my anger
    - Have a hard time focusing or concentrating
    - Think I may not live very long and feel there's no point in planning for the future
    - Am jumpy and get startled or surprised easily
    - Am always "on guard"
4. I experience these medical or emotional problems:
    - Stomach problems
    - Intestinal (bowel) problems
    - Gynecological (female) problems
    - Weight gain or loss
    - Pain, for example, in back, neck, or pelvic area
    - Headaches
    - Skin rashes and other skin problems

- Lack of energy; feel tired all the time
- Alcohol, drug, or other substance use problems
- Depression or feeling down
- Anxiety or worry
- Panic attacks
- Other symptoms such as: ____________________________

Taken from www.dvbic.org

Neurobehavioral Symptom Inventory- 22 (NSI-22)

Neurobehavioral Symptom Inventory (NSI)

Please rate the following symptoms with regard to how much they have disturbed you IN THE LAST 2 Weeks.
The purpose of this inventory is to track symptoms over time. Please do not attempt to score.

0 = None – Rarely if ever present; not a problem at all

1 = Mild – Occasionally present, but it does not disrupt my activities; I can usually continue what I'm doing; doesn't really concern me.

2 = Moderate – Often present, occasionally disrupts my activities; I can usually continue what I'm doing with some effort; I feel somewhat concerned.

3 = Severe – Frequently present and disrupts activities; I can only do things that are fairly simple or take little effort; I feel I need help.

4 = Very Severe – Almost always present and I have been unable to perform at work, school or home due to this problem; I probably cannot function without help.

Symptoms	0	1	2	3	4
Feeling Dizzy	O	O	O	O	O
Loss of balance	O	O	O	O	O
Poor coordination, clumsy	O	O	O	O	O
Headaches	O	O	O	O	O
Nausea	O	O	O	O	O
Vision problems, blurring, trouble seeing	O	O	O	O	O
Sensitivity to light	O	O	O	O	O
Hearing difficulty	O	O	O	O	O
Sensitivity to noise	O	O	O	O	O
Numbness or tingling on parts of my body	O	O	O	O	O
Change in taste and/or smell	O	O	O	O	O
Loss of appetite or increased appetite	O	O	O	O	O
Poor concentration, can't pay attention, easily distracted	O	O	O	O	O
Forgetfulness, can't remember things	O	O	O	O	O
Difficulty making decisions	O	O	O	O	O
Slowed thinking, difficulty getting organized, can't finish things	O	O	O	O	O
Fatigue, loss of energy, getting tired easily	O	O	O	O	O
Difficulty falling or staying asleep	O	O	O	O	O
Feeling anxious or tense	O	O	O	O	O
Feeling depressed or sad	O	O	O	O	O
Irritability, easily annoyed	O	O	O	O	O
Poor frustration tolerance, feeling easily overwhelmed by things	O	O	O	O	O

Date:

Name:

Medical Record #:

(Used with permission: Cicerone,KD: J Head Tr Rehabil 1995;10(3):1-17)

Warrior Administered Retrospective Casualty Assessment (WARCAT)

Due to formatting issues, this assessment could not be included in the product. The assessment can be found at www.va.gov or by contacting the authors.

VA TBI screening tool (VATBIST)

1. During any of your OIF/OEF deployment(s), did you experience any of the following events?

1 D Blast or explosion (IED, RPG, Landmine, Grenade, etc)
2 D Vehicular accident/crash (any vehicle including aircraft)
3 D Fragment wound or bullet wound above the shoulders
4 D Fall
5 D Blow to head (head hit by falling/flying object, head hit by another person, head hit against something, etc)

2. Did you have any of these immediately afterwards?

1 D Losing consciousness/“knocked out”
2 D Being dazed, confused, or “seeing stars”
3 D Not remembering the event
4 D Concussion
5 D Head injury

3. Did any of the following problems begin or get worse afterwards?

1 D Memory problems or lapses
2 D Balance problems or dizziness
3 D Sensitivity to bright light
4 D Irritability
5 D Headaches
6 D Sleep problems

4. In the past week, have you had any of the symptoms from Section 3?

1 D Memory problems or lapses
2 D Balance problems or dizziness
3 D Sensitivity to bright light
4 D Irritability
5 D Headaches
6 D Sleep problems

Structured Interview for TBI Diagnosis

During your deployment, were you exposed to:

D Blast	D IED	D Bullet above the shoulder	D RPG	D Mortar	D Landmine	D Grenade
D Blow to the head	D Vehicular accident	D Fall	D Assault			

Any other event (specify) that may have caused a brain injury?

For each event:

Were you wearing a helmet? –If you were exposed to a blast, how close were you to the explosion? If you were exposed to a blast, was there any object between you and the explosion? –If yes, what? Approximately when did the event occur? (date) –If there was more than one event, approximately how much time elapsed between Did you lose consciousness?	D Yes D No D Yes D No D Yes D No
–If yes, for how long?	
Do you remember this or did someone tell you about it?	D I remembered D I was told
Were you disoriented or confused after the event?	D Yes D No
–For how long?	
–Do you remember this or did someone tell you about it?	D I remembered D I was told
What happened leading up to the event?	
–Do you remember this or did someone tell you about it?	D I remembered D I was told
What happened during the event itself?	
–Do you remember this or did someone tell you about it?	D I remembered D I was told
What is the first thing you remember after the event?	
–Do you remember this or did someone tell you about it?	D I remembered D I was told
What is the next thing you remember? (repeat as needed)	
–Do you remember this or did someone tell you about it?	D I remembered D I was told
What symptoms did you have after the event?	
Were you treated for your injury?	D Yes D No
Details:	

Rate the Injury (ies):

How likely is it that the veteran sustained at least one TBI?

D Not at all likely D Very unlikely D Somewhat unlikely D Somewhat likely D Very likely

D Almost certainly

How many TBIs did this veteran experience? (based on the # of events rated as very likely or almost certainly) If it is likely that the veteran sustained one or more TBIs, how severe was each?

D 1. Transient confusion, no loss of consciousness, concussion symptoms, or mental status abnormalities resolved in less than 15 minutes.
D 2. Transient confusion, no loss of consciousness, concussion symptoms, or mental status abnormalities lasted more than 15 minutes but no more than an hour.
D 3. Transient confusion, no loss of consciousness, concussion symptoms, or mental status abnormalities lasted between one and 24 hours.
D 4. Transient confusion, no loss of consciousness, concussion symptoms, or mental status abnormalities last more than 24 hours.
D 5. Loss of consciousness from very brief (seconds) to several minutes. Concussion symptoms or mental status abnormalities resolve in less than 15 minutes.
D 6. Loss of consciousness from very brief (seconds) to several minutes. Concussion symptoms or mental status abnormalities lasted more than 15 minutes.
D 7. Loss of consciousness more than an hour but less than a day.
D 8. Loss of consciousness more than a day.

Taken from Donnelly et al., 2011

Arizona Sexual Experiences Scale (ASEX)

For each item, please indicate your **OVERALL** level during the **PAST WEEK**, including **TODAY**.

1. How strong is your sex drive?

1	2	3	4	5	6
extremely strong	very strong	somewhat strong	somewhat weak	very weak	no sex drive

2. How are you sexually aroused (turned on)?

1	2	3	4	5	6
extremely easily	very easily	somewhat easily	somewhat difficult	very difficult	never aroused

FOR MALE ONLY

3. Can you easily get and keep an erection?

1	2	3	4	5	6
extremely easily	very easily	somewhat easily	somewhat difficult	very difficult	never

FOR FEMALE ONLY

3. How easily does your vagina become moist or wet during sex?

1	2	3	4	5	6
extremely easily	very easily	somewhat easily	somewhat difficult	very difficult	never

If you have had any sexual activity in the past week, please also answer the following two questions. If not, leave questions 4, and 5 blank.

No Sexual activity in past week ....

4. How easily can you reach an orgasm?

1	2	3	4	5	6
extremely easily	very easily	somewhat easily	somewhat difficult	very difficult	never reach orgasm

5. Are your orgasms satisfying?

1	2	3	4	5	6
extremely satisfying	very satisfying	somewhat satisfying	somewhat unsatisfying	very unsatisfying	can't reach orgasm

COMMENTS:

Taken from www.va.gov

PTSD Assessments

Brief Checklist of traumatic symptoms

Check the symptoms below that you experience. Include symptoms you have even if you are not sure they are related to a traumatic event.

I experienced or witnessed a traumatic event during which I felt extreme fear, helplessness, or horror.

The event happened on (day/month/year) _______________.

What happened? ____.

1. I have symptoms of re-experiencing or reliving the traumatic event:
   - Have bad dreams or nightmares about the event or something similar to it
   - Behave or feel as if the event were happening all over again (this is known as having flashbacks)
   - Have a lot of strong or intense feelings when I am reminded of the event
   - Have a lot of physical sensations when I am reminded of the event (for example, my heart races or pounds, I sweat, find it hard to breathe, feel faint, feel like I'm going to lose control)
2. I have symptoms of avoiding reminders of the traumatic event:
   - Avoid thoughts, feelings, or talking about things that remind me of the event
   - Avoid people, places, or activities that remind me of the event
   - Have trouble remembering some important part of the event
3. I have noticed these symptoms since the event happened:
   - Have lost interest in, or just don't do, things that used to be important to me
   - Feel detached from people; find it hard to trust people
   - Feel emotionally "numb" or find it hard to have loving feelings even toward those who are emotionally close to me
   - Have a hard time falling or staying asleep
   - Am irritable and have problems with my anger
   - Have a hard time focusing or concentrating

- Think I may not live very long and feel there's no point in planning for the future
- Am jumpy and get startled or surprised easily
- Am always "on guard"

4. I experience these medical or emotional problems:
    - Stomach problems
    - Intestinal (bowel) problems
    - Gynecological (female) problems
    - Weight gain or loss
    - Pain, for example, in back, neck, or pelvic area
    - Headaches
    - Skin rashes and other skin problems
    - Lack of energy; feel tired all the time
    - Alcohol, drug, or other substance use problems
    - Depression or feeling down
    - Anxiety or worry
    - Panic attacks
    - Other symptoms such as: ______________________________

Summing it up

If you checked off some of the symptoms above, it is important for you to let your health care provider know. This information helps providers plan your medical treatment. It can also help them connect you with services you may need.

Taken from www.dvbic.org

PTSD checklist-military (PCL-M)

Instructions: Below is a list of problems and complaints that veterans sometimes have in response to stressful military experiences. Please read each one carefully, then circle the numbers to the right to indicate how much you have been bothered by that problem in the past month.

Taken from www.va.gov

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1.	Repeated, disturbing *memories, thoughts,* or *images* of a stressful military experience?	1	2	3	4	5
2.	Repeated, disturbing *dreams* of a stressful military experience?	1	2	3	4	5
3.	Suddenly *acting* or *feeling* as if a stressful military experience *were happening again* (as if you were reliving it)?	1	2	3	4	5
4.	Feeling *very upset* when *something reminded you* of a stressful military experience?	1	2	3	4	5
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, sweating) when *something reminded you* of a stressful military experience?	1	2	3	4	5
6.	Avoiding *thinking about* or *talking about* a stressful military experience or avoiding *having feelings* related to it?	1	2	3	4	5
7.	Avoiding *activities* or *situations* because *they reminded you* of a stressful military experience?	1	2	3	4	5
8.	Trouble *remembering important parts* of a stressful military experience?	1	2	3	4	5
9.	*Loss of interest* in activities that you used to enjoy?	1	2	3	4	5
10.	Feeling *distant* or *cut off* from other people?	1	2	3	4	5
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?	1	2	3	4	5
12.	Feeling as if your *future* will somehow be *cut short*?	1	2	3	4	5
13.	Trouble *falling* or *staying asleep*?	1	2	3	4	5
14.	Feeling *irritable* or having *angry outbursts*?	1	2	3	4	5
15.	Having *difficulty concentrating*?	1	2	3	4	5
16.	Being "*super-alert*" or watchful or on guard?	1	2	3	4	5
17.	Feeling *jumpy* or easily startled?	1	2	3	4	5

Mississippi scale for combat related PTSD (M-PTSD)

Please circle the number that best describes how you feel about each statement.

1. Before I entered the military, I had more close friends than I have now.

1	2	3	4	5
Not at all True	Slightly True	Somewhat True	Very True	Extremely True

2. I do not feel guilt over things that I did in the military.

1	2	3	4	5
Never True	Rarely True	Sometimes True	Usually True	Always True

3. If someone pushes me too far, I am likely to become violent.

1	2	3	4	5
Very Unlikely	Unlikely	Somewhat Unlikely	Very Likely	Extremely Likely

4. If something happens that reminds me of the military, I become very distressed and upset.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

5. The people who know me best are afraid of me.

1	2	3	4	5
Never True	Rarely True	Sometimes True	Frequently True	Very Frequently True

6. I am able to get emotionally close to others.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

7. I have nightmares of experiences in the military that really happened.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

8. When I think of some of the things that I did in the military, I wish I were dead.

1	2	3	4	5
Never True	Rarely True	Sometimes True	Frequently True	Very Frequently True

9. It seems as if I have no feelings.

1	2	3	4	5
Not at all True	Rarely True	Sometimes True	Frequently True	Very Frequently True

10. Lately, I have felt like killing myself.

1	2	3	4	5
Not at all True	Slightly True	Somewhat True	Very True	Extremely True

11. I fall asleep, stay asleep and awaken only when the alarm goes off.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

12. I wonder why I am still alive when others died in the military.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

13. Being in certain situations makes me feel as though I am back in the military.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

14. My dreams at night are so real that I waken in a cold sweat and force myself to stay awake.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

15. I feel like I cannot go on.

1	2	3	4	5
Not at all True	Rarely True	Sometimes True	Very True	Almost Always True

16. I do not laugh or cry at the same things other people do.

1	2	3	4	5
Not at all True	Rarely True	Somewhat True	Very True	Extremely True

17. I still enjoy doing many things that I used to enjoy.

1	2	3	4	5
Never True	Rarely True	Sometimes True	Very True	Always True

18. Daydreams are very real and frightening.

1	2	3	4	5
Never True	Rarely True	Sometimes True	Frequently True	Very Frequently True

19. I have found it easy to keep a job since my separation from the military.

1	2	3	4	5
Not at all True	Slightly True	Somewhat True	Very True	Extremely True

20. I have trouble concentrating on tasks.

1	2	3	4	5
Never True	Rarely True	Sometimes True	Frequently True	Very Frequently True

21. I have cried for no good reason.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

22. I enjoy the company of others.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

23. I am frightened by my urges.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

24. I fall asleep easily at night.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

25. Unexpected noises make me jump.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

26. No one understands how I feel, not even my family.

1	2	3	4	5
Not at all True	Rarely True	Somewhat True	Very True	Extremely True

27. I am an easy-going, even-tempered person.

1	2	3	4	5
Never	Rarely	Sometimes	Usually	Very Much So

28. I feel there are certain things that I did in the military that I can never tell anyone, because no one would ever understand.

1	2	3	4	5
Not at all True	Slightly True	Somewhat True	True	Very True

29. There have been times when I used alcohol (or other drugs) to help me sleep or to make me forget about things that happened while I was in the service.

1	2	3	4	5
Never	Infrequently	Sometimes	Frequently	Very Frequently

30. I feel comfortable when I am in a crowd.

1	2	3	4	5
Never	Rarely	Sometimes	Usually	Always

31. I lose my cool and explode over minor everyday things.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Very Frequently

32. I am afraid to go to sleep at night.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Almost Always

33. I try to stay away from anything that will remind me of things which happened while I was in the military.

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Almost Always

34. My memory is as good as it ever was.

1	2	3	4	5
Not at all True	Rarely True	Somewhat True	Usually True	Almost Always True

35. I have a hard time expressing my feelings, even to the people I care about.

1	2	3	4	5
Not at all True	Rarely True	Sometimes True	Frequently True	Almost Always True

Taken from www.ptsd.vs.gov

Primary Care PTSD Screen

In your life, have you ever had any experience that was so frightening, horrible, or upsetting that, **in the past month**, you*

1. Have had nightmares about it or thought about it when you did not want to?

YES NO

2. Tried hard not to think about it or went out of your way to avoid situations that reminded you of it?

YES NO

3. Were constantly on guard, watchful, or easily startled?

YES NO

4. Felt numb or detached from others, activities, or your surroundings?

YES NO

Current research suggests that the results of the PC-PTSD should be considered "positive" if a patient answers "yes" to any three items. A positive response to the screen does not necessarily indicate that a patient has Posttraumatic Stress Disorder. However, a positive response does indicate that a patient may have PTSD or trauma-related
problems and further investigation of trauma symptoms by a mental-health professional may be warranted.

Taken from www.va.gov

Deployment Risk and Resilience Inventory 2 (DRRI-2)

Due to formatting issues, this assessment could not be included in this product. The assessment can be located at:

- ✓ www.va.gov or by contacting the authors.

PTSD checklist-stressor specific version (PCL-S)

The event you experienced was __________________________ on _______________________.

(event) (date)

INSTRUCTIONS: Below is a list of problems and complaints that people sometimes have in response to stressful life experiences. Please read each one carefully, then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month.

		Not at all	A little bit	Moderately	Quite a bit	Extremely
1.	Repeated, disturbing *memories, thoughts,* or *images* of the stressful experience?	1	2	3	4	5
2.	Repeated, disturbing *dreams* of the stressful experience?	1	2	3	4	5
3.	Suddenly *acting* or *feeling* as if the stressful experience *were happening again* (as if you were reliving it)?	1	2	3	4	5
4.	Feeling *very upset* when *something reminded you* of the stressful experience?	1	2	3	4	5
5.	Having *physical reactions* (e.g., heart pounding, trouble breathing, sweating) when *something reminded you* of the stressful experience?	1	2	3	4	5
6.	Avoiding *thinking about* or *talking about* the stressful experience or avoiding *having feelings* related to it?	1	2	3	4	5
7.	Avoiding *activities* or *situations* because *they reminded you* of the stressful experience?	1	2	3	4	5
8.	Trouble *remembering important parts* of the stressful experience?	1	2	3	4	5
9.	*Loss of interest* in activities that you used to enjoy?	1	2	3	4	5
10.	Feeling *distant* or *cut off* from other people?	1	2	3	4	5
11.	Feeling *emotionally numb* or being unable to have loving feelings for those close to you?	1	2	3	4	5
12.	Feeling as if your *future* will somehow be *cut short*?	1	2	3	4	5
13.	Trouble *falling* or *staying asleep*?	1	2	3	4	5
14.	Feeling *irritable* or having *angry outbursts*?	1	2	3	4	5

15.	Having *difficulty concentrating*?	1	2	3	4	5
16.	Being "*super-alert*" or watchful or on guard?	1	2	3	4	5
17.	Feeling *jumpy* or easily startled?	1	2	3	4	5

Taken from www.va.gov

References

American Occupational Therapy Association (AOTA, 2007). Occupational therapy's role in veterans' health care. Retrieved from www.aota.org/Students/Advocate/AdvocacyFact/40487.aspx

American Occupational Therapy Association Commission on Practice (AOTA Commission, 2012). The role of occupational therapy in wound management: A position paper. Retrieved from http://www.aota.org/DocumentVault/Wound-Management.aspx?FT=.pdf

Belmont, P. J., Schoenfeld, A. J., & Goodman, G. (2010). Epidemiology of Combat Wounds in Operation Iraqi Freedom and Operation Enduring Freedom: Orthopedic Burden of Disease. *Journal of Surgical Orthopedic Advances.* 19(1), pp. 1-6.

Cameron, R.P., Mona, L.R., Syme, M. L., Cordes, C.C., Fraley, S.S., Chen, S.S.,…Lemos, L. (2011). Sexuality among wounded veterans of operation enduring freedom (OEF), and operation new dawn (OND): Implications for rehabilitation psychologists. *Rehabilitation Psychology 56*(4), pp. 289-301. doi: 10.1037/a0025513

Champion, H. R., Bellamy, R. F., Roberts, P. & Leppaniemi, R. (2003). Profile of combat injury. *The Journal of Trauma*, 54(5), pp. 13-19. doi: 10.1097/01.TA.0000057151.02906.27

Curtin C.M., Suarez P.A., Di Ponio L.A., & Frayne S.M. (2012). Who are the women and men in veteran's health administration's current spinal cord injury population? *Journal of Rehabilitation Research &* Development, 49(3) pp.351–60. doi: 10.1682/JRRD.2010.11.0220

Department of Defense (2010). Dictionary of military and associated terms. Retrieved from http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf

Fischer, H. (2010). U.S. military casualty statistics: Operation new dawn, operation Iraqi freedom, and operation enduring freedom. *Congressional Research Service* 7-5700, RS22452. Retrieved from http://www.fas.org/sgp/crs/natsec/RS22452.pdf.

Gawande, A. (2004). Casualties of war—Military care for the wounded from Iraq and Afghanistan. *The New England Journal of Medicine*, *351*(24), pp. 2471-2475. doi: 10.1056/NEJMp048317.

Granick M. S., & Chehade M. (2007). The evolution of surgical wound management: toward a common language. *Surgical wound management* (Eds Granick M. S., Gamelli R. L.), pp. 17–28. New York, NY: Informa

Hobbs, K. (2008). Reflections on the culture of veterans. *American Association of Occupational Health Nurses, 56*(8), pp. 337-341.

McFarland, L.V., Choppa, A.J., Betz, K., Pruden, J.D. & Reiber, G.E. (2010). Resources for wounded warriors with major traumatic limb loss. *Journal of Rehabilitation Research & Development*, *47*(4) pp. 1-13. doi: 10.1682/JRRD.2009.0017

Taylor, C., & Jeffery, S. (2009). Management of military wounds in the modern era. *Wounds International*, *5*(4), pp. 50-58.

United States Army (2012). Weapons systems. Retrieved from http://www.army.mil/factfiles/

United States Department of Homeland Security (2009). IED attack: Improvised explosive devices. Retrieved from http://www.dhs.gov/xlibrary/assets/prep_ied_fact_sheet.pdf

United States Department of Veteran Affairs (2009). Caring for war wounded. Retrieved from http://www.publichealth.va.gov/docs/vhi/oef_oif.pdf

United States Department of Veteran Affairs (2012a). Health benefits: Do you qualify for VA health care. Retrieved from http://www.va.gov/healthBenefits/resources/eligibility_check.asp

United States Department of Veteran Affairs (2001). Medical care for persons with spinal cord injury. Retrieved from http://www.publichealth.va.gov/docs/vhi/spinalcord.pdf

United States Department of Veteran Affairs (2012b). Polytrauma/TBI system of care. Retrieved from http://www.polytrauma.va.gov/system-of-care/care-facilities/

United States Department of Veteran Affairs (2012c). Spinal cord injury & disorder: SCI center locations. Retrieved from http://www.sci.va.gov/sci_centers.asp

United States Department of Veteran Affairs (2002). Traumatic amputation and prosthetics. Retrieved from http://www.publichealth.va.gov/docs/vhi/traumatic_amputation.pdf

United States Department of Veteran Affairs (2012d). Veterans health administration: Locations. Retrieved from http://www2.va.gov/directory/guide/division_flsh.asp?dnum=1

United States Department of Veterans Affairs (2012e). Veterans health benefits guide. Retrieved from http://www.va/gov/healthbenefits/resources/publications.asp

VA Health Care (2012). Spinal cord injury: Fact sheet. *Quality Enhancement Research Initiative*. Retrieved from http://www.queri.research.va.gov/about/factsheets/sci_factsheet.pdf

Violence Policy Center (2011). The militarization of the U.S. civilian firearms market. Retrieved from http://www.vpc.org/studies/militarization.pdf