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Abstract

The military culture is one of unique practices, traditions and beliefs that represent a shared unifying language with a distinct set of guiding principles. With the increasing numbers of veterans and their families reintegrating into civilian life, it is likely that most healthcare professionals, including optometrists, will provide care for veterans and their families at some point during their professional careers. Cultural and linguistic competency can better prepare the optometric healthcare provider and solidify the foundation for proper management and care. Cultural and linguistic competency can also help to ensure effective, understandable and respectful care for all patients, improving patient satisfaction and overall health outcomes.

Key Words: *military culture, military cultural competence, traumatic brain injury, veterans, vision, civilian optometrist*

Introduction

The military culture is one of unique practices, traditions and beliefs that represent a shared unifying language with a distinct set of guiding principles.¹ For many civilian healthcare providers without any prior military experience, immersion in this cross-cultural environment adds a layer of complexity and possible difficulty to the clinical exam that otherwise may not have been considered.

In recent decades, a cultural gap has developed between civilians and the armed forces. This gap can be attributed to a number of causes, and the most obvious is the decision in 1973 to establish a large, professional, all-volunteer military force.³ This ideological shift created a separation of citizen from soldier. During every previous era, there was a well-known mandate “to serve.” The departure from the tradition of conscription and the delineation between the military and civilian worlds has now been in place for more than four decades. For nearly two generations since the volunteer conscription act was passed, only 0.5% of the population have chosen to voluntarily serve.⁴ This new norm has trickled to government. In 1975, 70% of Congress had served within the armed forces vs. 20% today. The country’s past three presidents had never served in active duty.³

Approximately 80% of current military members are from small populations of multigenerational (legacy) military families. Additionally, nearly half of active duty members originate from only five states (California, Virginia, Texas, North Carolina and Georgia).⁴ The U.S. Census Bureau reports that only 7.3% of all living Americans have served in the military at some point in their lives with the majority being older than age 65.⁵ Though there is an appreciation of those who have served, there is an absence of personal exposure by most citizens and, as a result, a lack of cultural awareness of this group as a distinct minority. Many civilians have never felt the personal impact of our most recent global conflicts or personally known someone who has served. This unawareness and knowledge deficiency has become commonplace with the healthcare sector.

As of 2014, the U.S. Department of Veterans Affairs (VA) estimated that there were 22 million military veterans in the U.S. population. An interim report by the Congressional Budget Office claims that 66% of veterans receive care completely outside of the VA,⁶ while a report by Lee et al. states that approximately only 9 of the 22 million veterans receive care at the VA.⁷ There may be many reasons that veterans seek health care outside of the VA system, including the assumption that they are not eligible, that they do not geographically reside near a VA facility, that their current medical problems are not service-related (therefore not treatable by the VA), or (most notably) the reports of mismanagement, substandard treatment and schemes that have resulted in lack of quality health care and access. For example:

- In 2010, new-patient applications were found stuffed in the drawers of VA processors’ desks.
- In May 2014, the VA’s Inspector General launched an investigation after managers of a VA hospital in Phoenix, Ariz., were accused of [concealing months-long wait times](#). The probe eventually widened to include [26 medical facilities](#).
- In 2015, it was reported that more than 307,000 veterans may have died before their applications to receive care at a VA hospital were processed.
- More than 800,000 records were stalled and possibly 10,000 records were deleted between 2010 and 2015. One applicant had been reportedly waiting for almost 14 years to be considered for VA health care.⁸

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The intense pressure faced by VA facilities is the result of a number of interlinked factors:

- The VA has struggled to meet unprecedented demand as improved medical care during combat has left more soldiers with lifelong wounds.
- Veterans of the Vietnam and Korean wars are living longer and require more care.
- While the injuries sustained are more profound, the VA's technical patient management systems are out of date, leading to considerable duplication, delays and errors.

Because increasing numbers of veterans and their families are reintegrating into civilian life, it is likely that most healthcare professionals, including optometrists, will provide care for them during their careers. As a result, the Joining Forces initiative launched in 2011 to help bridge the gap between civilian providers and military patients. This initiative emphasized the importance of providing proper care to veterans, service members and their families as well as the significance of military cultural competency. Whether military culture or pathology-specific curricula were being addressed was evaluated at the source of medical training. A nationwide survey was conducted at more than 100 medical schools and health systems to determine the extent to which future physicians were being trained to care for military personnel.⁹ Of the 104 participating schools, only 21.2% included any material on military culture and only 31% indicated that their curriculum provided training in military cultural competency.⁹

Another study showed that any discussion of traumatic brain injury (TBI) or post-traumatic stress disorder (PTSD), two of the most predominant diagnoses post-deployment, was limited to 56.7% and 47.1%.⁶ In addition, with regard to healthcare-provider awareness of military status in patients, it was found that only 39% of providers outside the VA/Department of Defense (DoD) were screening for military service.⁶ These numbers are disheartening because such a simple question about a patient's military history can affect how a provider conducts an exam, determines common pathologies and considers evaluation/treatment techniques.

To practice cultural and linguistic competency is to tailor the delivery of health care to the patient's background, taking into account, among other characteristics, his or her gender, age, ethnicity, socioeconomic status and religious values. It involves the knowledge that such factors shape a patient's perceptions about health, establish expectations for care, and ultimately guide medical decision-making. With the continued concerns about disparities in health care, and the need for healthcare systems to accommodate increasingly diverse patient populations, cultural and linguistic competency has become a matter of national concern and a cornerstone of patient-centered care in recent years. The functional definition of cultural and linguistic competency is "the integration and transformation of knowledge about individuals and groups of people into specific standards, policies, practices, and attitudes used in appropriate cultural settings to increase the quality of services; thereby producing better outcomes."¹⁰ It is within the capacity of individuals and organizations to work and communicate effectively in cross-cultural situations.

Competency occurs through adopting and implementing strategies to ensure appropriate awareness of, attitudes towards, and actions about diverse populations' cultures and languages. Cultural and linguistic competency can better prepare the optometric healthcare provider and solidify the foundation for proper management and care. It can also help to ensure effective, understandable and respectful care for all patients, improving patient satisfaction and overall health outcomes.¹¹ Cultural competence has been deemed so important that the new edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) includes cultural considerations with each diagnosis.⁶ The process of cultural competency includes making progress towards adopting certain principles with the understanding that competency is a series of stages of development and a lifelong commitment to learning rather than a specific achievement or one single knowledge point.

To better interact with veterans in a culturally competent manner, clinicians must first expand their knowledge and comprehend how military service can potentially affect military personnel, families and veterans.¹² As noted by Hall, "Unless we understand their language, their structure, why they join, their commitment to the mission, and the role of honor and sacrifice in military service, we will not be able to adequately intervene and offer care to these families."¹³

Military Structure, Culture, Values and Challenges

Military culture is unique in that it is defined by its organizational structure, rules and framework, which self-regulate its members on a daily basis.⁹ As a very brief introduction, there are three major departments, the VA, the DoD, and the Military Departments. The VA is responsible for providing vital services such as healthcare, benefits programs and access to national cemeteries to former military personnel and their dependents. The DoD is the organizing body in charge of the Military Departments, which are the armed forces branches that include the Air Force, Army, Marine Corps, Navy and

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Coast Guard. The DoD is also responsible for providing the military forces needed to deter war and protect the security of our country.

Though the missions and values of the armed forces branches are similar, each has its own subculture² and serves a different purpose. Each branch has active and reserve components, with active duty military personnel serving full-time and reserve and guard members typically serving part-time. Full-time military members usually live at a military installation and often focus on their duties full-time, while reserve members face the challenge of managing both their civilian and military duties between the times they are called to active duty. Service members can either choose to enlist (minimally requires a high school diploma or equivalent) or accept commission as an officer (minimally requires a bachelor's degree).¹² The duties expected of members vary depending on military designation and whether the member is an officer or enlisted personnel.

Each branch has a hierarchal rank or grade system that outlines each person's position, authority and pay. This hierarchal system helps to define the chain of command for seniors and subordinates. As a result there is a huge component of trust — trust that the senior has the greater good in mind for all, trust that the mission (no matter the sacrifice) is necessary, and trust that the subordinate will follow through on orders with obedience and discipline to successfully complete the mission at hand.¹² Although there are great attempts to maintain standardization in the military, large differences exist among its members. To begin, the appeal of joining the service varies from member to member. Studies reveal that members join for different reasons; risk, patriotism, financial security, benefits, challenge, adventure, fidelity and dignity (to name a few), with the latter two being the most common.^{12,14,15} The personal cultural influences also vary immensely. Each individual brings his or her own sense of values, norms, ideas and meanings.¹² In order to unify the culture, the military uses structure and basic training whereby new recruits are introduced to new norms, language, codes and identity through vigorous instruction,¹² with the hope that the recruit will relate to his/her new military culture more than his or her previous civilian culture. Once roles are more defined and recruits' occupations are chosen, members may begin to relate more to their specific occupation within their branch, creating yet another subculture.

Finally, multiple deployments with combat exposure lead to a huge contrast with that of civilian culture and life. Military members are expected to deploy at any given time, which results in a constant state of flux with schools, friends and simple daily routines.⁶ Military families are accustomed to quickly changing their lives and quickly accepting new members and providing a support framework. Despite this sense of community, military families face many challenges. The constant flux of members leaving on deployment leads to a greater demand on military spouses, who must disproportionately increase their roles within the household and manage the family as a single parent. This can lead to increased parental stress, child behavioral problems, healthcare utilization, child maltreatment and mental health problems.¹⁶ Upon a member's return, the challenge of transitioning back into the pre-deployment family structure can be difficult and compounded by combat-related physical and mental health challenges. For some members, returning may mean separation from the military and the challenge of reintegration into the civilian community where there is less formal structure and access to support and services, an overall loss of identity, and a lack of knowledge by civilian providers of the potential effects of their service on their health and wellness. For many returning veterans, it has been years since they were part of civilian society.¹²

Consideration of the military culture, structure and values can allow healthcare providers to better serve those who have served our nation.

Clinical Considerations in the Context of the Military Individual

Common diagnoses

It is the responsibility of optometrists to provide care to the best of our ability within our scope of practice, but also to provide patients with the proper resources and referrals if necessary. Consideration of military culture can help contextualize patient symptoms, aid treatment planning and ultimately improve health outcomes.¹⁷

Unlike previous generations of veterans, modern-day veterans have had multiple (as well as longer) tours of duty with exposure to modern warfare-related injuries and illnesses. This results in medical histories and needs that are more complex than those of previous generations. Veterans returning from combat have a constellation of health concerns, including physical, psychological and psychosocial issues, which persist long after they have left the battlefield. Veterans have also been shown to be at higher risk for conditions specific to their population and their particular wars. In a recent audio podcast, U.S. Sen. Tammy Duckworth (D-IL) discussed the ongoing concern about lack of knowledge among civilian healthcare providers about common service-related illnesses.¹⁸ She shared the example of patient in his 60s who visited a civilian doctor and was diagnosed with diabetes mellitus (DM) and prostate cancer. While the patient will most likely receive the best of care for both illnesses, he would have been evaluated differently had he been seen at a VA facility.

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Because DM and prostate cancer are commonly linked to Agent Orange exposure, he would have been asked whether he was a Vietnam veteran and further evaluated for other related diseases.

The stigma of not being “tough enough” or “weak,” along with a negative perception of complaining, can lead members of the military to downplay illness, which can further delay diagnosis, treatment and recovery. For this reason, it is essential for providing proper care and initiating proper referrals that doctors are able to identify and assess the most common service-related health concerns, ocular and non-ocular.

Military members may present with a multitude of issues, some of which may be obvious, e.g., amputations, visible scars, hearing impairment, or gait or balance issues, but others that may be invisible to a clinician. TBI has been labeled as the “signature wound” of the most recent wars due to the nature of the conflicts.¹⁹ The Defense and Veterans Brain Injury Center recently stated that 352,619 military members were diagnosed with TBI from 2000-2016 (Q1-Q2).²⁰ Although much effort has been made to improve diagnosis, TBI can still remain undiagnosed and its effects can linger for months to years after the initial injury. Due to the mechanism of the injury, the resulting non-ocular symptoms of TBI can present in any combination of chronic pain, systemic problems, or problems with cognition, sensory processing, communication and behavior.²¹ A study by Goodrich et al. found that the most common self-reported visual complaints with TBI are blurred vision, sensitivity to light, missing parts of vision, bumping into objects or walls, blurred reading vision, or difficulty reading continuous text.²² Therefore, it is no surprise that the most common ocular diagnoses in the acute or chronic phase are convergence insufficiency, accommodative insufficiency, pursuit/saccadic dysfunction, fixation instability (inability to maintain steady fixation on a single stimulus) and strabismus.¹⁴ Based on a retrospective analysis of the records of 160 patients with TBI, Ciuffreda et al. reported that 90% had oculomotor dysfunction, such as deficits in vergence (56.3%), accommodation (41.1%) or version (51.3%), and strabismus (25.6%).²³ These residual visual sequelae are vast, but within the scope of optometric management and treatment.

Other invisible mental health issues include depression, anxiety, suicide risk and PTSD.¹⁹ PTSD has been shown to affect an estimated 11% to 20% of veterans of Iraq and Afghanistan combat, 30% of Vietnam War veterans and 10% of Gulf War veterans.²⁴ This is concerning, as many veterans will choose to self-medicate with drugs or alcohol to alleviate symptoms leading to lifelong alcohol and substance abuse.²⁵ PTSD can cause great emotional withdrawal, decreased ability to communicate in an effective way, and less intimacy. Some veterans may become overly attached to their spouse in an attempt to cope with their experiences while others may avoid interaction altogether.¹² In more than 70% of couples in which a veteran is diagnosed with PTSD, significant relationship distress has been reported. In contrast, it has been reported in only 30% of couples in which a veteran does not have PTSD.^{26,27}

Military sexual trauma (MST) is a common problem reported by 6.8% of women and 1.8% of men. The actual numbers are estimated to be much higher, i.e., 20-30% of women and 2-4% of men.¹⁹ The 2015 Military Sexual Violence fact sheet²⁸ includes the following statistics:

- 47,000 sexual assaults were reported in 2014 alone.
- 1 in 7 victims were assaulted by someone in their chain of command.
- An estimated 85% of victims did not report the crime.
- 62% who did report a crime faced some level of retaliation from their superiors and commanders.
- 1/3 of the above referenced victims were discharged within 7 months of making a report.

MST can lead to a unique combination of psychological issues such as PTSD, depression, anxiety and substance abuse,²⁹ more commonly in women than in men. Women veterans present their own unique set of risks and issues. In addition to being at a higher risk of sexual assault, they are more likely to suffer from depressive disorders,³⁰ obesity and chronic smoking, and lead sedentary lifestyles compared to their male counterparts.

Service in certain parts of the world can also pose increased risk for infectious diseases such as malaria and tuberculosis as well as parasitic infections, some of which may not manifest until years after exposure.³¹ Combat exposure can increase risk for social exclusion, criminality, homelessness, self-harm, substance misuse, unexplained medical complaints, and mental illness.³² When healthcare providers are aware of the most prevalent illnesses and chronic injuries among military members and veterans, health outcomes can be improved.

Clinical examination

A culturally competent doctor-patient conversation must be open to the potential effects of military service on patient

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health. As discussed previously, a simple question about prior military service can change the direction of the clinical examination markedly for the patient and optometric provider. “Are you currently serving or have you ever served in the military?” is a simple and effective “ice-breaker” question. If the veteran is not apprehensive and both parties are comfortable, a more focused military history should continue and also include specific questions^{1,25} such as:

- In which branch of the armed forces did you serve?
- What was your specialty while in the service?
- Where were you stationed?
- Were you ever deployed?
- Were you ever engaged in combat or exposed to any blasts?
- How have things been going for you since leaving the military?

Not all military patients will present with a history of TBI, but given its high prevalence in the veteran population, it should always be considered as a potential cause of symptoms. A streamlined and structured approach should be taken to evaluate this type of patient, as the histories can be very complicated.

Optometrists who do not otherwise have experience with TBI may struggle with which direction the examination should take. Ciuffreda and Ludlam³³ present a simplified and systematic approach to the clinical management of TBI patients for the optometric clinician. Their four-tiered approach is briefly described below, but more detailed information can be found in their article “Conceptual Model of Optometric Vision Care in Mild Traumatic Brain Injury.”³³ Information can also be found on treatment considerations for each potential diagnosis. This guide is meant to address the TBI patient, beginning with basics such as a proper refraction, binocular testing and ocular health examination and ending with non-vision-based problems. Treatment considerations should be given to all aspects of the TBI patient. Even a non-vision-based problem such as short- or long-term memory loss can lead to difficulties with vision-related rehabilitation due to poor comprehension or understanding.

Tier 1: The Basic Optometric Vision Examination

- assessment of refractive status
- assessment of binocular status
- assessment of ocular health status

Tier 2: Oculomotor-Based Vision Problems

- assessment of versional eye movements
 - fixation
 - saccades
 - pursuits
 - vestibular
 - optokinetic systems
- assessment of vergence eye movements
 - accommodative vergence
 - AC/A ratio
 - fusional vergence ranges (distance/near)
 - phorias (distance/near)
 - vergence facility
 - near point of convergence

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- assessment of accommodation
 - amplitude of accommodation
 - lag of accommodation
 - relative accommodation
 - accommodative facility

Tier 3: Non-Oculomotor-Based Vision Problems

- abnormal spatial localization
- photosensitivity
- motion sensitivity
- vestibular dysfunction
- vision field defect
- visual information processing dysfunction

Abnormal spatial localization can mean a shift in one's orientation and localization of straight ahead. These patients may have difficulty with ambulation and localization of objects. They may also present with visual neglect or post-trauma vision syndrome. Though there are multiple methods to formally measure abnormal spatial localization, simply observing the patient as he or she enters the room for balance, gait issues, and posture while standing and in the exam chair can help to diagnose spatial localization problems. Yoked prisms can be used to optically displace the visual field so the subjective vs. objective directional mismatch is reduced. Yoked prisms are usually placed horizontally but can also be placed vertically or obliquely. The prism is placed base in the same direction and the magnitude is slowly increased until the mismatch between the patient's perceived center and the objective true center is observed. The amount of prism varies between 2-6 prism diopters at distance and can be slightly more at near.

Photosensitivity is most commonly experienced with fluorescent lighting due to the flickering nature of this light, but can also be common with all types of lights (indoors and outdoors). The use of tints and the recommendation of wearing brimmed hats can be extremely beneficial to alleviate some of these symptoms. The color and percentage of tint can vary and is based on patient preference.

Motion sensitivity is most common in visually crowded environments such as malls or grocery stores but can also be perceived with a repetitive pattern such as black and white tiles on a floor. These patients tend to report nausea, dizziness or a feeling of unsteadiness. The use of binasal occlusion with black or translucent tape has been used as it can reduce the amount of visual stress seen by both eyes through partial occlusion of the retinal images.

Vestibular dysfunction symptoms can include vertigo, lightheadedness when standing, oscillopsia, fatigue, blurred vision and disequilibrium. Specific history questions about whether the symptoms worsen when moving the head back and looking up or in the dark can be helpful in further pinpointing a dysfunction. If a dysfunction is suspected, referral to a physical therapist and a neurologist is necessary.

Tier 4: Non-Vision-Based Problems

- depression
- fatigue
- cognitive impairment
- behavioral problems
- postural problems
- attentional problems
- neurological problems

Referrals and resources

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Many resources (both local and national) are available to support the care of veterans. For non-vision-based problems, an inter-disciplinary approach is essential, and referrals to the appropriate specialists, such as neurologists, audiologists, psychiatrists, internal medicine physicians, therapists (occupational, physical, speech language), and family/marriage counselors, are key. The Veterans Health Research Institute (https://www.ncire.org/vet_resources/) provides multiple resources for veterans depending on their personal situation and needs.

Treating the patient as a whole within the matrix of family, friends, jobs, etc. can mean the difference for a veteran in their overall recovery and success.

Future Improvements in Obtaining Military Cultural Competency

Looking forward to the future, how can optometry improve its military cultural competency? Consideration should be given to introducing service-related visual problems, specifically those related to TBI given its prevalence, into the curricula of optometry schools. The military history should be taught as a routine part of the clinical examination in all optometry schools, as should the simple act of inquiring whether a patient has a military background. Involvement of more military treatment facilities (MTFs) as externship sites or one- to two-day clinical experiences can be extremely beneficial.

Optometrists who are already in practice should consider other avenues such as:

- Military health conferences
- Public events at local military posts
- Visiting local MTFs
- Online resources, such as those offered in “Basic Training: A Primer on Military Life and Culture for the Health Care Providers,”³⁴ as well as from the [Uniformed Services University/Center for Deployment Psychology](#), and the [VA](#), which include training, handouts and resources for specific veteran groups

Making a conscious effort and taking responsibility as a member of society might very well be one of the most important motivating factors in gaining cultural competency.

Conclusion

Until recently, the military was not considered a culturally distinct demographic. Due in part to mainstream legislative efforts, most notably the Joining Forces initiative, the realization that the military is a unique entity requiring a more nuanced clinical approach has grown. The military overlaps multiple cultures, creating an even more complex and intricate network than previously thought.

The delivery of health care with sensitivity to all aspects of a patient’s background is crucial to obtaining the best possible clinical outcomes. Engaging in military cultural competence requires an awareness of the patient’s behaviors and values as well as a willingness to help. When providers possess a basic knowledge of military values, the ability to offer culture-specific care improves. This creates a more long-lasting alliance between doctor and patient resulting in better care and outcomes. Although service members may be years removed from their service when seen by civilian providers, they still carry their armed service identity. As the authors Pappamihel and Pappamihel mention, “Service members retain values, attitudes, and behaviors that are distinctly military and significantly set apart from civilian ways.”³⁵ Core values such as trust, honor, integrity, courage and strength can affect all aspects of the cultural identity and are not forgotten once the uniform is removed. Sensitivity to these values establishes a critical relationship between the civilian optometrist and the service member.

When providers seek to better understand the cultural backgrounds of their patients they are better equipped to provide more effective care. It is critical for clinicians to be well-informed about military culture and experience in order to provide culturally sensitive prevention and interventional services for service members, families and communities.²⁵

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References

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1. Levander XA, Overland MK. Care of women veterans. *Med Clin North Am.* 2015;99(3):651-62. doi: 10.1016/j.mcna.2015.01.013. PubMed PMID: 25841605.
2. Meyer E. Case report: military subcultural competency. *Military Medicine.* 2013;178(7):e848-50. Epub 2013/07/04. doi: 10.7205/milmed-d-13-00027. PubMed PMID: 23820363.
3. Eikenberry KW, Kennedy DM. Americans and their military, drifting apart. *New York Times*, May 26, 2013. Accessed March 23, 2017. Available from: <http://www.nytimes.com/2013/05/27/opinion/americans-and-their-military-drifting-apart.html>.
4. Zucchini D, Cloud DS. Special Report U.S. Military And Civilians Are Increasingly Divided. *Los Angeles Times*, May 24, 2015. Accessed March 24, 2017. Available from: <http://www.latimes.com/nation/la-na-warrior-main-20150524-story.html>.
5. United States Census Bureau. Accessed March 24, 2017. Available from: <https://www.census.gov/topics/population/veterans.html>.
6. Meyer EG, Writer BW, Brim W. The importance of military cultural competence. *Curr Psychiatry Rep.* 2016;18(3):26. Epub 2016/02/03. doi: 10.1007/s11920-016-0662-9. PubMed PMID: 26830884.
7. Lee J, Sanders KM, Cox M. Honoring those who have served: how can health professionals provide optimal care for members of the military, veterans, and their families? *Acad Med.* 2014;89(9):1198-200. Epub 2014/07/01. doi: 10.1097/acm.0000000000000367. PubMed PMID: 24979290.
8. Devine C. CNN Politics. 307,000 veterans may have died awaiting Veterans Affairs health care, report says. Accessed March 24, 2017. Available from: <http://www.cnn.com/2015/09/02/politics/va-inspector-general-report/>.
9. Association of American Medical Colleges. Serving those who serve America: joining forces: results of an AAMC survey. Accessed Dec. 10, 2016. Available from: <http://members.aamc.org/eweb/upload/ServingThoseWhoServeAmerica.pdf>.
10. Davis K. Exploring the intersection between cultural competency and managed behavioral health care policy: implications for state and county mental health agencies. Alexandria, VA. National Technical Assistance Center for State Mental Health Planning, 1997. Accessed Dec. 2016. Available from: <http://www.nasponline.org/resources/culturalcompetence/definingcultcomp.aspx;>.
11. Cross TL. Towards a culturally competent system of care. CASSP Technical Assistance Center, 1989. Accessed Dec. 2016. Available from: http://archive.mhsoac.ca.gov/Meetings/docs/Meetings/2010/June/CLCC_Tab_4_Towards_Culturally_Competent_System.pdf.
12. Redmond SA, Wilcox SL, Campbell S, et al. A brief introduction to the military workplace culture. *Work (Reading, Mass).* 2015;50(1):9-20. Epub 2014/12/31. doi: 10.3233/wor-141987. PubMed PMID: 25547167.
13. Hall LK. The importance of understanding military culture. *Social Work in Health Care.* 2011;50(1):4-18. Epub 2011/01/18. doi: 10.1080/00981389.2010.513914. PubMed PMID: 21240768.
14. Brahm KD, Wilgenburg HM, Kirby J, Ingalla S, Chang CY, Goodrich GL. Visual impairment and dysfunction in combat-injured servicemembers with traumatic brain injury. *Optometry and Vision Science.* 2009;86(7):817-25. Epub 2009/06/13. doi: 10.1097/OPX.0b013e3181adff2d. PubMed PMID: 19521270.
15. Stelmack JA, Frith T, Van Koeveering D, Rinne S, Stelmack TR. Visual function in patients followed at a Veterans Affairs polytrauma network site: an electronic medical record review. *Optometry (St Louis, MO).* 2009;80(8):419-24. Epub 2009/07/29. doi: 10.1016/j.optm.2009.02.011. PubMed PMID: 19635432.
16. Trautmann J, Alhusen J, Gross D. Impact of deployment on military families with young children: a systematic review.

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- Nursing Outlook. 2015;63(6):656-79. Epub 2015/07/18. doi: 10.1016/j.outlook.2015.06.002. PubMed PMID: 26183660.
17. Ross PT, Ravindranath D, Clay M, Lybson ML. A greater mission: understanding military culture as a tool for serving those who have served. *J Grad Med Educ*. 2015;7(4):519-22. Epub 2015/12/23. doi: 10.4300/jgme-d-14-00568.1. PubMed PMID: 26692959. PubMed Central PMCID: PMC4675404.
 18. The University of Chicago Institute of Politics and CNN. The Axe Files with David Axelrod, Episode 106: Sen. Tammy Duckworth. 2016.
 19. Kelty R, Kleykamp M, Segal DR. The military and the transition to adulthood. *Future Child*. 2010;20(1):181-207. Epub 2010/04/07. PubMed PMID: 20364627.
 20. DoD Worldwide Numbers for TBI. Assessed Nov. 13, 2016. Available from: <http://dvbic.dcoe.mil/dod-worldwide-numbers-tbi>.
 21. Lowell L, Cohen A, Kapoor N. Optometric management of visual sequelae of frontal lobe-related traumatic brain injury. *Journal of Behavioral Optometry*. 2010;21(1):3-11.
 22. Goodrich GL, Kirby J, Cockerham G, Ingalla SP, Lew HL. Visual function in patients of a polytrauma rehabilitation center: a descriptive study. *J Rehabil Res Dev*. 2007;44(7):929-36. Epub 2007/12/14. PubMed PMID: 18075950.
 23. Ciuffreda KJ, Kapoor N, Rutner D, Suchoff IB, Han ME, Craig S. Occurrence of oculomotor dysfunctions in acquired brain injury: a retrospective analysis. *Optometry (St Louis, MO)*. 2007;78(4):155-61. Epub 2007/04/03. doi: 10.1016/j.optm.2006.11.011. PubMed PMID: 17400136.
 24. U.S. Department of Veterans Affairs, PTSD: National Center for PTSD. How common is PTSD? Accessed Dec. 4, 2016. Available from: <http://www.ptsd.va.gov/public/PTSD-overview/basics/how-common-is-ptsd.asp>.
 25. Coll JE, Weiss EL, Yarvis JS. No one leaves unchanged: insights for civilian mental health care professionals into the military experience and culture. *Social Work in Health Care*. 2011;50(7):487-500. Epub 2011/08/19. doi: 10.1080/00981389.2010.528727. PubMed PMID: 21846250.
 26. Riggs DS, Byrne CA, Weathers FW, Litz BT. The quality of the intimate relationships of male Vietnam veterans: problems associated with posttraumatic stress disorder. *J Trauma Stress*. 1998;11(1):87-101. Epub 1998/02/28. doi: 10.1023/a:1024409200155. PubMed PMID: 9479678.
 27. Hirsch KA. Sexual dysfunction in male Operation Enduring Freedom/Operation Iraqi Freedom patients with severe post-traumatic stress disorder. *Military Medicine*. 2009;174(5):520-2. Epub 2009/05/01. PubMed PMID: 20731284.
 28. Facts on United States Military Sexual Violence, updated Sept. 2016. Assessed March 24, 2017. Available from: http://protectourdefenders.com/downloads/MST_Fact_Sheet_160916.pdf.
 29. Street AE, Vogt D, Dutra L. A new generation of women veterans: stressors faced by women deployed to Iraq and Afghanistan. *Clin Psychol Rev*. 2009;29(8):685-94. Epub 2009/09/22. doi: 10.1016/j.cpr.2009.08.007. PubMed PMID: 19766368.
 30. Lehavot K, Hoerster KD, Nelson KM, Jakupcak M, Simpson TL. Health indicators for military, veteran, and civilian women. *Am J Prev Med*. 2012;42(5):473-80. Epub 2012/04/21. doi: 10.1016/j.amepre.2012.01.006. PubMed PMID: 22516487.
 31. Gleeson TD, Hemmer PA. Providing care to military personnel and their families: how we can all contribute. *Acad Med*. 2014;89(9):1201-3. Epub 2014/07/01. doi: 10.1097/acm.0000000000000368. PubMed PMID: 24979291.
 32. Deahl MP, Klein S, Alexander DA. The costs of conflict: meeting the mental health needs of serving personnel and service veterans. *Int Rev Psychiatry*. 2011;Apr;23(2):201-9. Epub 2011/04/28. doi:10.3109/09540261.2011.557059. PubMed PMID: 21521090.
 33. Ciuffreda KJ, Ludlam DP. Conceptual model of optometric vision care in mild traumatic brain injury. *Journal of*

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Behavioral Optometry. 2011;22(1):10-2.

34. Goldenberg M, Hamaoka D, Santiago P, McCarroll J. F. Uniformed Services University of the Health Sciences. Edward Hébert School of Medicine. Basic training: a primer on military life and culture for health care providers. Assessed Oct. 30, 2017. Available from:
http://deploymentpsych.org/sites/default/files/mc_resources/Basic%20Training%20A%20primer%20on%20military%20life%20and%20culture.pdf.
35. Pappamihiel CJ, Pappamihiel E. Cultural self-awareness as a crucial component of military cross-cultural competence. Journal of special operations medicine : a peer reviewed journal for SOF medical professionals. 2013;13(3):62-9. Epub 2013/09/21. PubMed PMID: 24048992.



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