

Adaptive Sports for Women Veterans with Post Traumatic Stress Disorder, Traumatic Brain Injury, and Military Sexual Trauma

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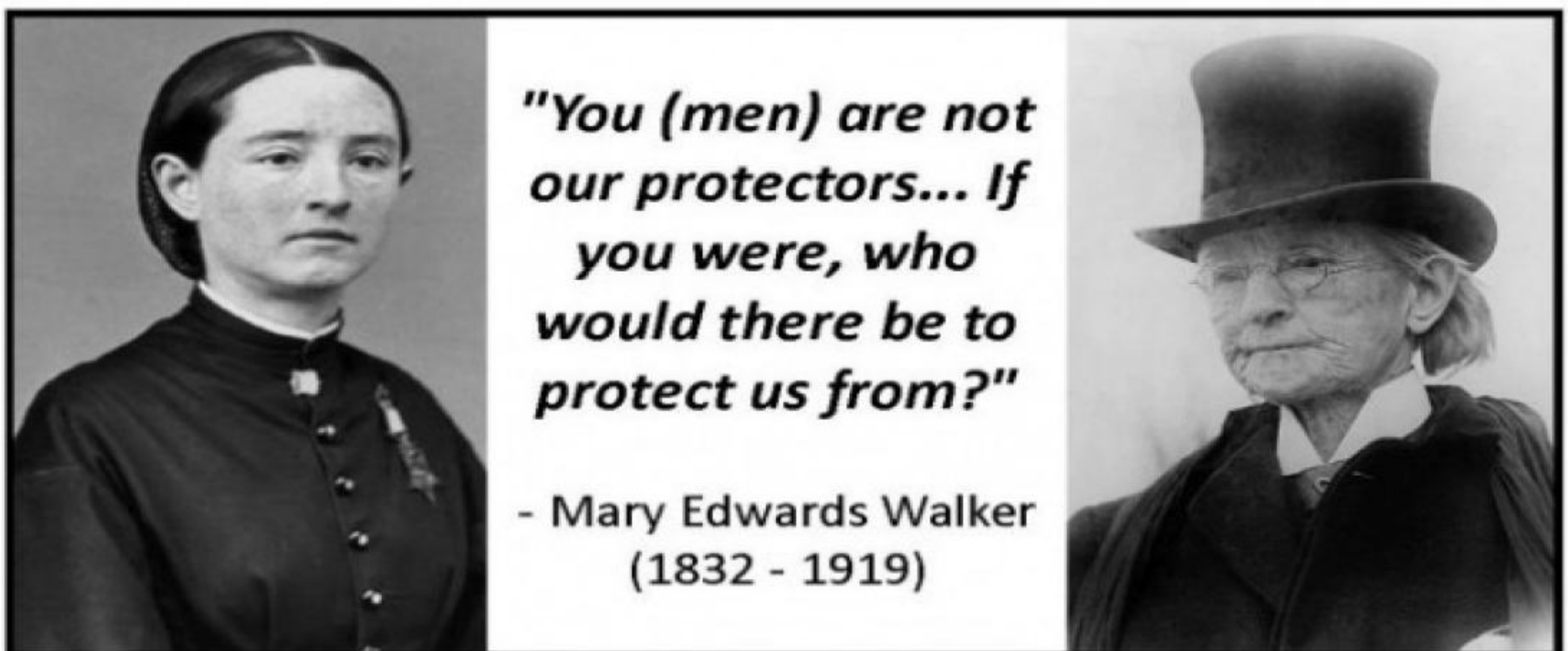
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Johan Huizinga once said, "Play is a uniquely adaptive act, not subordinate to some other adaptive act, but with a special function of its own in human experience" (Huizinga, 1948). Dreams, passions, and purpose are what guide us to finding fulfillment in our lives. Play, sports, and recreation are integral components of this journey. This is how we are able to recreate who we are, and to work on who we want to become. Huizinga describes play as being purposeful and a necessary part of how we learn to be... well, human.

There are many women whom have answered that special call of duty to serve this country, in order to preserve the ability for all to pursue our dreams, be able to experience great adventures, and become whatever and whomever we choose. There is a cost to answering that call of duty. For some, it has been far greater than expected, changing their dreams and aspirations and dampening their ability to pursue them. Every veteran who has served in the Armed Services has his or her own

unique story. There are stories of great achievements and accomplishments as well as epic failures. The most frequent stories are of bonds formed and camaraderie with fellow unit members. The military transforms its forces to be fearless, protect the weak, and preserve freedom at all costs.

There are no reliable military statistics on disabled veterans, and little information beyond personal accounts, to tell us what life might have been like for wounded and disabled veterans during the first hundred years of American history. Most who served were men, but women served as nurses, laundresses, cooks, and in other supportive roles, beginning with the Revolutionary War. The first woman Medal of Honor recipient, Dr. Mary Edwards Walker, served during the Civil War as a surgeon in the Union Army (http://archive.defense.gov/home/features/2015/0315_womens-history/). We can infer from death rate records from the Revolutionary War through the Civil War that because of insufficient medical care and the primitive state of



the medical profession, most severely wounded soldiers died, unlike those surviving with disabilities today (Puente-Duany, 2009). The survival rate of wounded combat veterans has continued to rise, beginning with Vietnam War through Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), as Service Members receive treatment while still in the field, are rapidly removed to field hospitals and returned stateside for state-of-the-art medical treatment, and face rehabilitation interventions that continue to evolve.

Despite these medical interventions, the transition back to the life of a veteran among civilians has proven to be difficult for some of our veterans, both men and women. Today, counselors, therapists and researchers are identifying a great increase in transition issues: there are physical disabilities, chronic pain, emotional issues dealing with the aftermath of combat and other life stressors, struggles to create a new identity and "fit in" with family and community, and for those who remain employable, the search for new employment after leaving active duty. The shift toward mind-body medicine and integration of "alternative interventions" into rehabilitation has prompted an expansion of sports and recreational opportunities for veterans. While participation in recreational and athletic opportunities helps maintain physical and emotional balance for many veterans, those veterans with post-traumatic stress, brain injury, and/or military sexual trauma are faced with finding a good fit in selecting a sport that can be adapted to special needs such as variable energy level, pain management, compromised mentation, and safety.

Historical Perspective

Organized sports for persons with physical disabilities existed as early as 1911, when the "Cripples Olympiad" was held in the United States. One of the successful athletes was Walter William Francis, a Welshman, who won both the running and wrestling championships (Thames Star, 1913). Adaptive sports programs were expanded to meet the need to rehabilitate veterans from World War II and the Korean and Vietnam Wars, primarily served male veterans. Jim Winthers, a WWII veteran who was a member of the U.S. 10th Mountain Division – the Skiing 10th, an elite group specifically trained for alpine warfare, was one of the early pioneers of adaptive sports. In 1953, Winthers was director of the Donner Ski Ranch in Northern California. Reunited with two buddies who lost legs in the war, and using techniques he saw in Europe, he taught them to ski on one leg (Disabled Sports USA, 2010). In 1967, the National Amputee Skiers Association (NASA) was founded with three chapters, and later renamed as the National Handicapped Sports and Recreation Association (NHSRA). In 1994, NHSRA was renamed Disabled Sports USA; it now includes 91 chapters in 36 states (Disabled Sports USA, 2010).

Today, opportunities for adaptive sports are available for both civilians and military personnel who have sustained permanent physically disabling injuries while in Iraq, Afghanistan, and across the globe. The Veteran's Administration (VA) recognizes 30 different sports as a therapeutic addition to treatment. The most recent publication of community based adaptive sports programs is posted at <http://www.va.gov/adaptivesports/docs/>

[CBASP web spreads.pdf](#).

Disability classification for sports exists in four categories: physical, mental, permanent and temporary. Disabled sports, also called adaptive sports or para-sports, are played by persons with a disability, including physical and intellectual disabilities. Many disabled sports are based on existing able bodied sports, modified to meet the needs of persons with disabilities. However, not all disabled sports are adapted; several sports that have been specifically created for persons with a disability have no equivalent in able-bodied sports. Some examples of sports developed for those with disabilities are wheelchair racing and basketball, power soccer (indoor soccer using power wheelchairs), and audio darts, goalball, and beeper ball (designed with sounds embedded in equipment for blind athletes).

Target Populations for Adaptive Sports

The Research and Development (RAND) Center for Military Health Policy Research recently found that 31 percent of returning Service Members from Iraq and Afghanistan meet criteria for a mental health condition such as post-traumatic stress disorder (PTSD), depression, or report experiencing a traumatic brain injury (TBI) (Tanielian & Jaycox, 2008). In addition, many service members are returning from combat with a wide variety of physical disabili-



ties, including amputations and visual impairments. Researchers have suggested that service members are twice as likely to experience amputations in OIF and OEF, as a result of the improvised explosive device (IED), than in any other conflict in the past century (Weisskopf, 2007). Incidents of service members returning home with visual impairments have also increased significantly (Zoroya, 2007).

Among Overseas Contingency Operations veterans utilizing health services through a VA hospital or care center between the years of 2001 and 2011, 21 percent were diagnosed with a depressive disorder (Congressional Budget Office, 2013). As of January 2009, the VA estimates approximately 20 percent of OIF and OEF veterans screened positive for traumatic brain injuries (TBI). In 2008, the VA reported that 21 percent of women screened positive for military sexual trauma (MST) during intake and physical assessments (Williamson, 2009).

Taken together, the numbers of TBI, PTSD, and MST diagnoses among women veterans are staggering. Just these three conditions, let alone those including other physical and mental health diagnoses, represent a huge

number of women veterans in need of adaptive sports and recreational opportunities that can accommodate chronic pain, trauma triggers, and/or avoidance reactions to new situations (the latter secondary to perceived threats to one's health and safety). At the same time, these sports opportunities are essential to maintaining women veterans' physical health, optimizing weight, rebuilding self-confidence, and offering supportive connections to others.

The Benefits and Implications of Adaptive Sports for Veterans

The benefits of physical activity and adaptive sports for injured veterans include reduced stress, increased quality of life, lower blood pressure, weight management, and enhancement of the rehabilitative process. Adaptive sports are available for veterans with cognitive, emotional, physical, and/or social impairments. They are meant to engage veterans in community-based activities to help them overcome their injuries. Through sports, wounded veterans have the opportunity to create new friendships, learn new skills, and challenge each other in some friendly competition. However, sports offer more than just an enjoyable activity to veterans. The increase in self-confidence and expanded perception of one's capacity to excel in physical activities, provide much more important motives and outcomes for participation (Cornett & Puymbroek, 2010).

Adaptive sports and therapeutic recreation programs are also uniquely positioned to help alleviate many of the physical and emotional symptoms of PTSD, TBI and MST. They facilitate stress reduction,

the development of social networks, the redevelopment of skills needed to enjoy activities, and the recreation of joyful memories, all of which are particularly challenging for veterans with PTSD, TBI, and MST (Schiraldi, 2000). As the number of women veterans who have served during OIF and OEF conflicts with acquired disabilities such as TBI, PTSD, and MST expands (Ainspan & Penk, 2008), so will the need for therapeutic recreation specialists and adaptive sports programs to meet their needs.

Disabled Sports USA teamed up with the Department of Labor to study the correlation between participation in sports and employment among Americans with disabilities. The study sample of 1,108 Americans with disabilities included 203 veterans who suffered traumatic injuries while serving in Iraq or Afghanistan. The results showed that 90 percent of disabled veterans surveyed felt their quality of life had significantly improved through physical activity (Disabled Sports USA, 2009).

In another study, Wise & Matthews (2010) found that one year after injury, more than three-fourths of their subjects with TBI had not returned to pre-injury levels of leisure activities. Their new activities were less social and more sedentary, such as watching television. The study also concluded that those individuals who survived a TBI, experience a substantial decrease in participation in leisure activities after injury, with a resulting negative impact on life satisfaction.

There are numerous programs emerging all over the United States that provide recreational opportunities for men and women veterans recovering or moving

through issues related to PTSD, TBI and/or MST. These programs are organized by individuals who share a common mission to help those who sacrificed for our freedoms. Many of these programs are moving wounded warriors out of hospital beds and putting them in kayaks, out on the trails or on yoga mats.



Engaging Female Veterans

The total veteran population in the United States and its territories as of September 30, 2015, was 21,680,534. The population of women veterans numbered 2,035,213. States with the largest number of women veterans were Texas, California, Florida, Virginia and Georgia (Department of Veterans Affairs, 2015). Refer to populations



All Women's Trip on the San Juan River sponsored by Team River Runner and Adaptive Sports Association

listed by state: <http://www1.va.gov/WOMENVET/docs/WomenVeteransPopulationFactSheet.pdf>. Women now represent 10 percent of all veterans, and almost 18.5 percent of our current Service Members, numbers that will only increase as more women enlist and more career tracks open to women Service Members (<http://download.militaryonesource.mil/12038/MOS/Reports/2013-Demographics-Report.pdf>). Women are now eligible for 90 percent of all assignments. The increase in the numbers of women serving in combat and the increase in victims reporting MST have led to more women filing claims and seeking treatment for injuries. As these numbers rise, there is an increasing need for adaptive sports for this population.

In May 2015, I was given the opportunity to participate in a program designed for female veterans offered by Team River Runner USA (www.teamriverrunner.org), in collaboration with Adaptive Sports Association out of Durango, Colorado (<http://asadurango.com/>). The staff was made up of an all-female crew of raft guides, as well as all-female veteran participants. We began our journey in Durango, Colorado and traveled down to the San Juan River in Utah. We paddled 59 miles down the San Juan River in 5 days using rafts, inflatable kayaks and hard shell kayaks. This trip gave female veterans an opportunity to bond with each other and to talk through some of the unique issues of our military service, as well as the transitions, injuries and traumas that we have faced.



Team River Runner Southeast Rendezvous in Bryson City, NC

I took the opportunity one evening around the campfire to ask these ladies about other programs in which they have participated. I also wanted to know more about why they had not participated in other adaptive sports and recreation programs so that I may advise program directors in

breaking down barriers that prevent female veterans from participating. There were many interesting points made, but three consistent responses emerged: a) a lack of awareness of adaptive sports programs; b) erroneous impression that programs are exclusive to combat veterans only; and c) the lack of female participation in programs (e.g., no women in promotional photos or program descriptions, no female only sessions, no female guides or instructors, etc.). This single adaptive sports experience was transformative. It encouraged many of us who participated to self-identify as veterans, connect with other female veterans, and take more risks in adaptive sports. We encourage other female veterans to do the same!

Adaptive sports were created for all veterans as an alternative or supplement to clinical treatment. Some of the roadblocks to participation are similar for both men and women: reluctance to take risks or test physical capacities (especially after injuries), difficulty in identifying resources and for those with MST, and fear for one's safety in new situations. Women have some additional roadblocks, including finding resources exclusively for women, single parenting issues, including managing finances, arranging for childcare in order to attend, and fear that getting injured might have catastrophic effects on caretaking of children and maintaining family functions. Programs designed for "women veterans only" may alleviate some of these issues, especially for those with MST who fear and avoid participating in co-ed programs. There are many programs that offer op-

portunities to integrate the family unit in sports and recreation. A number of adaptive sports and recreation programs exclusively for women have been developed to encourage women to “take the plunge” in supervised experiences such as Team River Runner as described above. For example, Challenge Aspen Military Opportunities (CAMO) retreats in Colorado offer co-ed, couple, family and women veteran retreats with seasonal opportunities to ski, snowboard, skate, fly-fish, raft, and hike (<https://challengeaspen.org/military/>). Women Veteran Social Justice (WVSJ), based in Georgia, offers half-day programs for women veterans that introduce them to working in the expressive arts, and to working with horses in equine therapy. It also sponsors meet-ups that incorporate adaptive indoor rock-wall climbing, and weekend retreats in the mountains or at the beach, with options for hiking, swimming, and walking (<http://www.wvsjnetwork.org/>). Boulder Crest Retreats in Virginia offer a variety of Warrior PATHH retreats for men and women veterans (separately), as well as veteran couples and families. These programs incorporate group recreational activities including archery, equine therapy, and instruction in yoga and meditation (<http://www.bouldercrestretreat.org>).

While funding may pose a roadblock, many of these programs (including those described above) are free to veterans. These programs solicit support from their communities through fundraisers and grants to provide all the necessary resources available to provide the veteran the opportunity to participate. For women with children, some of these pro-



Challenge Aspen



Boulder Crest Retreat

grams incorporate family experiences that help military and veteran children identify and connect with other children, while their mothers connect to other veterans. A message of “we are not in this alone” enhances a strong bonding experience for all participants.

For those women who have previous experience in individual or team sports and are ready for a higher level of skill set development, and/or want to participate in competitive sports, the U.S. Military Paralympics program offers local, regional, national, and international competition. As of 2014, the U.S. Olympic Committee (USOC) designated almost 200 local service providers as Paralympic Sport Clubs, many of which have programs specifically for veterans. These opportunities are funded by the VA in partnership with the USOC and third party grants (<http://www.teamusa.org/US-Paralympics/Military/Veterans-Affairs-Partnerships>). The VA has a website designated to assisting veterans in locating a Sports Club closest to them (http://www.va.gov/adaptivesports/va_clubFinder.asp).

While some women veterans may be interested in competitive, adaptive sports, many are not. Regardless of skill level or experience, we encourage more women to take a chance and find a program that can best accommodate personal and family needs.

Summary and Recommendations

Transition from military service to civilian life has proven to be difficult for many women who have spent time serving their country. Research and personal statements from veterans have shown that be-

sides police and fire services, there are few jobs that can fill the loss of camaraderie that is longed for after one leaves military service. The sense of belonging and trust that is earned among “battle buddies” and unit members is difficult to explain to those who have not had the same experience. Service to country is not only a commitment to serve the people, it is also a lifestyle. There is an urgent need for more alternative recreation and adaptive sports in the toolbox for helping wounded women veterans on the road to recovery.

Recommendations

Funding is needed to expand adaptive sports and recreation programs and will need to extend beyond funding from the Department of Defense and the VA. Corporations, veteran service organizations, sports teams at all levels, and nonprofit organizations (particularly those whose missions target outdoor, recreational, and athletic opportunities) need to be invited to underwrite more adaptive sports programs for wounded women veterans. Collaborative efforts to promote and host events at local, regional, and national levels, similar to those currently invested in the Warrior Games, are needed across a wide variety of sports for those women who are not ready for or capable of the rigorous competition of the U.S. Military Paralympics.

Female veterans also need to step up, self-identify, and begin to participate in programs. It is a cyclical battle for organizations to begin new programs, but they often cannot or do not know how to locate enough women veterans to participate. Women veterans have been asking for al-

alternatives to drug therapy, and adaptive sports and recreation opportunities are among the most viable and beneficial options. It is now up to us to seek out information on these programs, participate, encourage and invite other women to participate.

There is also a need for cooperative programming from community partners. Many organizations that are currently operating outdoor recreation programs could readily open their doors to begin working with women veterans and offering opportunities for them to experience new adventures. Barriers such as fixed incomes for veterans living on disability and the need for transportation to and from programs, limit their participation. Though there are programs that seek funding to cover all costs, there are many that cannot cover expenses associated with travel to and from program sites. This is a great opportunity for corporations or other donors to issue scholarships or grants to support transportation for veterans to participate in these programs.

Women veterans need to take leadership roles to create, expand, and lead adaptive sports programs for other women veterans. Participation in programs where few females are present opens the doors for more women veterans to feel comfortable, knowing there is one of her own there to support her. More women veterans are also needed in university and graduate programs offering sports and recreation degrees. These programs are largely staffed or managed by male instructors/professors, few veterans, and have almost no women veterans in teaching and research positions.

Women veterans need to be visible in their communities and become advocates for other women veterans. Volunteering to serve as advisors or board members for adaptive sports and recreation programs will increase the visibility of women veterans, as well as offer opportunities to serve as advocates for more women veteran programs.

Finally, there is a need for further research on the efficacy of offering adaptive sports to women veterans. Those of us who have participated in these programs know from personal experience that they do change lives, our perspectives on the world, and our belief in ourselves; however, without scientific evidence to support this, it is difficult to justify funding. For this reason, I have chosen to pursue research in adaptive sports and to develop more opportunities for disabled men and women veterans. I have experienced how the very act of placing one veteran's "butt in a boat", saved her from taking her own life because of feelings of worthlessness. We need to commit to our fellow sisters (and brothers) to do our parts to support these programs with research-based interventions, to promote programs for veterans who have no knowledge of the resources available, and to encourage all veterans to "get back to nature, the outdoors, and physical fitness". We may never be as fit as we were in basic training or while deployed, but we all know what it means and how it feels to be moving, marching, the endorphin rush, and the connection of heart, body, mind, and spirit.

References

- Congressional Budget Office. (2013). Veterans health administration's treatment of PTSD and traumatic brain injury. Lulu Com.
- Corby-Edwards, A. (2009). Traumatic Brain Injury: Care and Treatment of Operation Enduring Freedom and Operation Iraqi Freedom Veterans. *Congressional Research Service*.
- Cornett, A., & Puymbroeck, M. (2010). Self-efficacy, sports, and rehabilitation: Implications for therapeutic recreation. *American Journal of Recreation Therapy*, 9(2), 33-39.
- Department of Veteran's Affairs. (2015). Fact sheet. Women veteran's population. Retrieved from <http://www1.va.gov/WOMENVET/docs/WomenVeteransPopulationFactSheet.pdf>
- Disabled Sports USA. (2010). Disabled Sports USA: Wounded warrior disabled sports project. Retrieved from <http://dsusa.org/programs-wwdsp-about.html>
- Institute of Medicine. (2007). Gulf war and health; deployment related stress and health outcomes. *National Academies Press*, 6.
- Lundberg, N., Bennett, J., Smith, S. (2011). Outcomes of Adaptive Sports and Recreation Participation among Veterans Returning from Combat with Acquired Disability. *Therapeutic Recreation Journal*, XLV(2), 105-120.
- Puent-Duany, M. (2009). The American veterans disabled for life memorial: A nation's debt of honor. Retrieved from: <http://www.fehb.org/AVDLM%20%20Lesson%20Plans.pdf>
- Putzke, J. D., Richards, J. S., Hicken, B. L., & DeVivo, M. J. (2002). Interference due to pain following spinal cord injury: Important predictors and impact on quality of life. *Pain*, 100(3), 231-242.
- Recreation & Sports. (n.d.). National resource directory: An online partnership for wounded, ill, and injured service members, veterans, their families, and those who support them. Retrieved from http://www.va.gov/adaptivesports/docs/CBASP_web_spreads.pdf
- Schiraldi, G. (2000). *The post-traumatic stress disorder sourcebook*. New York: McGraw-Hill.

Tanielian, T., & Jaycox, L. H. (2008). Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery. Retrieved from <http://veterans.rand.org>

U.S. Department of Veteran's Affairs. (n.d.). Women veteran's health care: facts and statistics about women veterans. Retrieved from: <http://www.womenshealth.va.gov/WOMENSHEALTH/latestinformation/facts.asp>

Williamson, R. (2009). VA health care: Preliminary findings on VA's provision of health care services to women veterans. *United States Government Accountability Office*.

Wise, E., & Mathews, C. (2010). Impact of traumatic brain injury on participation in leisure activities. *Archive of Physical Medicine and Rehabilitation*, 91(9).

Weisskopf, M. (2007). A grim milestone: 500 amputees. Retrieved from: <http://content.time.com/time/nation/article/0,8599,1580531,00.html>

Zoroya, G. (November 14, 2007). Blinded by war: Injuries send troops into darkness. *USA Today*.