

Amputee Sexual Dysfunction

Editorial

Recent combat operations in Iraq and Afghanistan have resulted in over 1,200 patients with major limb amputations, more than 75% of whom have amputations of the lower extremity [1]. Outcomes of limb amputation from the trauma and orthopaedic perspectives have been extensively studied in the military and civilian trauma literature. However, it was not until the Lower Extremity Assessment Project (LEAP) Study Group published how personal perceptions, such as self-efficacy, can positively or adversely affect outcomes that the orthopaedic trauma community began to appreciate the role that one's own image of self plays in recovery and reintegration [2]. Along these lines, health care providers should be sensitive to the multiplicity of influences affecting patients' self-image, quality of life, and thus, optimal rehabilitation.

Among these influences are one's sexual and reproductive health. The Iraq and Afghanistan generation of war veterans with amputations may find that their amputations impact their sexuality and vice versa.

Aberrations in sexual health within the military culture is documented even in uninjured service members. The military culture emphasizes fitness, endurance, performance, and resilience. These masculine "values" likely reflect the male predominance in the military but also overlap with an emphasis on an ideal, vigorous, capable body [3], placing a service member with any perceived body image deficiency at risk of sexual dysfunction. A recent survey of male military personnel without bodily injury found erectile dysfunction rates as high as 33% [4].

Adding common military related comorbidities, such as Post Traumatic Stress Disorder (PTSD), raises this rate to nearly 80% [5]. The military culture is not entirely perceived differently by females as a strong, independent body is likewise valued by service women. As with men, women veterans with no bodily injury are more likely than their civilian counterparts to have sexual health or reproductive complaint; and this is likewise compounded in the face of mental health diagnoses (such as PTSD) and for women with a history of sexual trauma sustained while in the military [6,7].

Beyond what appears to be a baseline risk of body image influenced sexual dysfunction, a service member who sustains an amputation is likely to experience compounded effects due to the effect of the amputation on body image and his or her experience as a "whole" person. The literature suggests that 20% of persons with amputation experience some sexual dysfunction [8]. Over 40% of persons with amputation experience a change in their sex life compared to before their amputation [9]. Female amputees report a heightened sense of anxiety and avoidance of intimacy after their amputations [10]. However, amputees report little to no discussion about sexual health from health care providers during rehabilitation [8].

Studies on sexuality and the military amputee specifically are sparse. One phenomenological study found that female

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combat amputees do perceive their bodies differently than male amputees, even in the absence of sexual dysfunction, reporting being heavily influenced by the social perceptions of a feminine body and concerns for personal safety due to their injury [11]. Otherwise, sexual dysfunction is beginning to receive due attention following injury patterns associated with genitourinary trauma, such as dismounted complex blast injury which results in a constellation of peroneal trauma and lower extremity amputation [12,13]. Sexual rehabilitation from a relationship and intimacy perspective, even in the setting of peroneal trauma however, has not been emphasized [14,15].

While a hyper-masculine military culture as a whole may contribute to the body image and sexual struggles faced by an injured service member, there exists a subculture of Wounded Warriors which may be leveraged to benefit combat amputees. The author's personal experience with greater than eight years caring for wounded service members within San Antonio Military Medical Center's Department of Orthopaedics and Rehabilitation suggests that wounded service members form a very tightly knit community where the shared experience of war and combat injury strengthens and fortifies itself. This is highly evident within the amputee culture where members self-engage in peer mentoring through rehabilitation course and prosthetic fitting and troubleshooting. A majority of amputee physical rehabilitation during recent wars has been conducted at major amputation centers where peer and social support are ingrained into the health care culture. Only within the past year has a Sexual Health and Intimacy Clinic been opened at Walter Reed National Medical Center due to funding support from the Bob Woodruff Foundation and SemperMax Support Fund. This effort was designed to reinforce the social aspect of healing and the repair home relationships through intimacy.

To summarize, military culture promotes a specific valued body image which can predispose military personnel to psychological aspects of sexual dysfunction. Injury, including amputations, which also dramatically alter one's body image, may compound

this, especially in light of a lack of sexual rehabilitation. Wounded Warriors including combat amputees within their own culture are highly supportive of each other and may provide the best grounds on which to build rehabilitation efforts towards sexual health and intimacy. As such, health care providers who care for veterans with amputations must be cognizant of how a patient's body image could affect his or her participation in physical and mental health rehabilitation and identify how sexual health contributes to social reintegration and maintenance of home relationships [17]. Even in the absence of specialty sexual health clinics, validated screening tools are widely available to help providers identify patients with sexual health concerns. Finally, health care providers must also recognize that once a patient leaves the supportive environment of a dedicated amputee rehabilitation setting, he or she has then lost both the eliteness found in the military culture and the unity found in the Wounded Warrior culture. Care at this stage may require an even greater emphasis on psychological health, social wellbeing, and confidence in reintegration, all of which may influence and may be influenced by sexual health [14].

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