



**BOB WOODRUFF
FOUNDATION**

Spotlight on How Military Service Can Affect Fertility

ISSUE/CHALLENGE

Infertility—the inability to conceive a child after trying for at least 12 months—affects 8 percent of the general U.S. population. Service members, however, experience infertility at roughly double that rate.¹ The military personnel or veterans most likely to be trying to have children now are those who served in Iraq or Afghanistan. A survey of male and female veterans from those wars found that 14 percent of men and 16 percent of women have struggled with infertility.²

Many aspects of military service can affect the degree to which service members face issues involving intimacy and fertility. Those aspects include physical challenges, mental health disorders, and other conditions of deployment that people may face while serving in the military. In addition, 8 percent of male married service members and 45 percent of female married service members are in dual-military marriages, a situation that compounds the chances of having difficulty starting or expanding a family.³

KEY FINDINGS

Military service can create challenges to fertility in various ways:

■ **Damage to Creative Organs.**

Wounds, illnesses, and injuries during military service that affect creative organs can have an impact on service members' and veterans' ability to have children. Blast injuries, such as those from improvised explosive devices (IEDs), typically involve shrapnel penetrating the lower extremities, which can cause serious harm to the external genitals. In addition, ill-fitting body armor, generally designed for male bodies, can cause negative health effects for female service members, such as abdominal hernias or damage to reproductive organs.⁴

■ **Post-Traumatic Stress Disorder.**

PTSD increases the likelihood that people will have problems with intimacy, because their brains connect arousal with aggression, which can cause them to feel afraid or threatened rather than open to intimacy.⁵ Male veterans with PTSD are four times more likely than men without PTSD to experience erectile dysfunction and have significantly reduced sperm motility (the ability of sperm to move properly).⁶ Women with symptoms of depression and PTSD may take longer to get pregnant.⁷ Couples in which a male partner has PTSD also face significantly higher rates of secondary infertility (the inability to conceive or carry a baby to term after previously having a child).⁸

■ **Traumatic Brain Injuries.**

TBIs cause significant changes in sexual desire, decreased sperm production, and sexual dysfunction.⁹ In studies of civilians, some women who suffered sports-related head injuries or moderate to severe TBIs experienced abnormal or missed periods because of disruptions to their reproductive systems.¹⁰ Those studies suggest concerns about long-term effects on the fertility of female service members who experience brain injuries during their time in the military.

■ **Combat Stress and Depression.**

Although combat stress on its own is less likely than some other factors to cause infertility, stress does interfere with a woman's ability to get pregnant.¹¹ Persistent stress can lead to depression, and women with a history of depression are twice as likely as their nondepressed counterparts to experience infertility.¹² Moreover, women with severe depressive symptoms are much less likely to conceive, regardless of whether they are taking psychotropic medications.¹³ The issue can affect men as well: Among couples being treated for infertility, those in which the male partner had major depression were 60 percent less likely to conceive and have a live birth than those in which the male partner did not have major depression.¹⁴

■ **Toxic Exposure.**

Military service can involve exposure to heavy metals, chemicals, and radiation, which can lower sperm production or cause issues with proper sperm functioning.¹⁵ In addition, veterans of the Gulf War and post-9/11 eras who were exposed to toxins from burn pits during their service may develop cancers of their reproductive organs.¹⁶

■ **Noise Exposure.**

Veterans experience higher rates of tinnitus than the general public because of the noise levels they encountered during their service, such as exposure to constant noise from gunfire, machinery, and aircraft.¹⁷ Studies show that hearing constant noise, even at a low level, can activate the body's stress response, disrupting the normal control of sex hormones.¹⁸ For example, exposure to continuous noise can lead the body to release cortisol, which produces hormones that process in a feedback loop to reduce levels of testosterone, which in turn can reduce both the number of sperm and their motility. For premenopausal women, tinnitus appears to be associated with irregularity of menstrual cycles.¹⁹

KEY FINDINGS *CONT.*

■ **Sexual Violence.**

As many as one in four female veterans report having experienced sexual trauma, including sexual assault, during their military service.²⁰ Female veterans who experienced sexual assault while serving in the military are at greater risk of needing a hysterectomy, which eliminates the ability to get pregnant.²¹

■ **Prescription Medications.**

Treatment for chronic illnesses that service members are diagnosed with while in uniform may involve medications that have negative effects on fertility. In particular, psychotropic medications—such as antidepressants, antipsychotics, and mood stabilizers—are often a first line treatment for PTSD and other mental disorders that veterans may cope with after service. Studies have found associations between the use of some psychotropic medications and effects on fertility, such as the suggestion that certain antianxiety medications may delay conception.²² Some medications that treat PTSD and depression can lead to erectile dysfunction, loss of libido, and other complications that affect fertility.²³

■ **Delayed Plans to Start a Family.**

Military deployments and training schedules may cause service members to postpone their plans to start a family—in some cases until after they transition out of their military career. Because people's ability to conceive children generally declines with age, such delays can make it more difficult to start a family.

DISCUSSION

Veterans deserve to thrive after military service in the next chapter of their lives. For many, thriving includes achieving their dream of having a family. Military service should not preclude the opportunity to start or expand a family. Although the Department of Veterans Affairs (VA) and the Department of Defense provide reproductive health care services, some military families still face barriers to accessing infertility care.

TRICARE, the military's health benefits program, covers the costs of limited services, including diagnoses of physical conditions that cause infertility and medical treatment to correct those causes. However, TRICARE typically does not cover intrauterine insemination (IUI), in vitro fertilization (IVF), donor eggs or sperm, or cryopreservation (freezing eggs or sperm) unless infertility resulted from a serious injury that a service member incurred while on active duty.

VA provides fertility services to some veterans who can prove that their fertility challenges stemmed directly from military service. However, because of legal restrictions on VA's services, veterans seeking such services must be legally married, and couples must use their own eggs and sperm. Couples who use donor eggs or sperm or surrogacy, or who require obstetrical care for a nonveteran spouse, are ineligible for VA infertility care. For people using private insurance, fertility services such as IUI and IVF are often not fully covered, regardless of the cause of infertility, marital status, or sexual orientation.

The Bob Woodruff Foundation's (BWF's) VIVA program helps veterans struggling with infertility achieve their dream of expanding their family by connecting them with resources and, in many cases, by providing financial support. BWF works in collaboration with VA to inform veterans who have service-connected fertility challenges about essential benefits and services available to them. When VA's extensive programs and resources are not appropriate, the VIVA program complements the government's fertility treatment services and provides funding to eligible veterans. BWF's inclusive eligibility criteria include funding for the use of donor sperm, eggs, and surrogates and more flexibility about the nature of a service-related illness, wound, or injury.

GOALS FOR THE FUTURE

The wider community that serves our nation's service members and veterans should focus on the following actions to help military families struggling with service-related fertility challenges:

- Create broader recognition by the military, the civilian public, health care providers, and insurance companies of the wide range of service-connected illnesses that military personnel and veterans experience.
- Encourage men and women who are joining the armed forces to discuss their family-related plans with their primary care providers before, or soon after, they begin military service.
- Encourage clinicians to provide guidance that helps patients make an informed choice about how medications for treating mental or physical conditions may affect fertility.
- Provide funding for service members' and veterans' fertility services to complement federal programs and private insurance.
- Broaden the range of conditions that are automatically assumed to cause service-connected infertility to include those listed above, in order to increase veterans' access to fertility services.
- Expand access to reproductive health care services for service members who have service-connected wounds, illnesses, or injuries that make it harder to have a child.



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About Stand SMART For Heroes

The Bob Woodruff Foundation is proud to partner with best-in-class scientific organizations to provide important research findings to the community of organizations that represent and serve post-9/11 veterans, service members, families, and caregivers.

For more information on the Bob Woodruff Foundation and Stand SMART For Heroes, please see bobwoodrufffoundation.org.

RESOURCES

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