

VA Reproductive Health Research

Reproductive health spans gynecological health throughout the lifespan, preconception care, maternity care, cancer care, menopausal management, sexually transmitted diseases, and an array of other understudied topics. The interaction of reproductive health with mental health and medical conditions is also important to examine, while women Veterans' military experiences may also influence their reproductive health in important ways. To establish a foundation for further research, evaluation and quality improvement, VA Women's Health Services oversaw development of the first report on the State of Reproductive Health in VHA (2014). This Report provides an overview of the reproductive health related diagnoses of women Veterans using the VA healthcare system.¹ VA reproductive health policy and planning summaries are also available in the published literature.^{2,3}

The VA HSR&D Women's Health Research Network (WHRN) supports a Strategic Priority Area in Reproductive Health, co-led by Kristin Mattocks, PhD (VA Central Western Massachusetts) (kristin.mattocks@va.gov) and Laurie Zephyrin, MD, MPH (Director, VHA Director of Reproductive Health, laurie.zephyrin@va.gov).

RESEARCH HIGHLIGHTS:

Reproductive Health Diagnoses

- The most frequent reproductive health diagnoses in VA include menstrual disorders and endometriosis among those ages 18-44, menopausal disorders among those aged 45-64, and osteoporosis among those aged 65 years or older.⁴

Gynecology Care

- Onsite VA gynecologist availability (>0.5 fulltime equivalent) has been associated with greater ability of obtaining a gynecology consultation in the emergency department (ED) and gynecologist follow-up after an ED encounter.⁵

Infertility Services, Prenatal Care, Pregnancy Complications, Maternity Care

- Prevalence of lifetime history of infertility was 15.8% for women and 13.8% for men serving in OEF/OIF, though after adjusting for sociodemographic and military characteristics, no

¹ Zephyrin LC, Katon J, Hoggatt KJ, et al. State of Reproductive Health in Women Veterans – VA Reproductive Health Diagnoses and Organization of Care. Women's Health Services, Veterans Health Administration, Department of Veterans Affairs, February 2014. Available at: <http://www.womenshealth.va.gov/latestinformation/publications.asp>.

² Zephyrin LC. Reproductive health management for the care of women Veterans. *Obstet Gynecol.* 2016

³ Zephyrin LC, Katon JG, Yano EM. Strategies for transforming reproductive healthcare delivery in an integrated healthcare system: A national model with system-wide implications. *Curr Opin Obstet Gynecol.* 2014;26(6):503-510.

⁴ Katon JG, Hoggatt KJ, Balasubramanian V, et al. Reproductive health diagnoses of women Veterans using Department of Veterans Affairs care. *Med Care.* 2015; 53(4 Suppl 1):S63

⁵ Gray KE, Katon JG, Callegari LS, et al. Gynecologists in the VA: Do they enhance availability of sex-specific services and policies in the emergency department? *Med Care.* 2015;53(4 Suppl 1):S76-S80.

gender difference was noted.⁶ Women, however, had an increased odds of seeking medical help for infertility. Less than 2% of OEF/OIF/OND women Veterans received infertility diagnoses from the VA, and of those, 22% received and infertility assessment or treatment.⁷

- Over 5-years (2008-12), the volume of women Veterans using VA maternity benefits increased by 44%, most of whom were age 30+ and had a service-connected disability.⁸
- Nearly one-third (32%) of pregnant women Veterans had 1+ mental health diagnoses (twice as likely to have a diagnosis of depression, anxiety, PTSD, bipolar disorder or schizophrenia as those without a pregnancy).⁹ Pregnant women Veterans who used VA prenatal benefits had higher rates of self-reported diagnosed depression and PTSD symptoms.¹⁰
- Of over 2,200 pregnant OEF/OIF/OND women Veterans identified between 2001-10, 5.2% had gestational diabetes and 9.6% had hypertensive disorders of pregnancy.¹¹

Contraception

- Among women Veterans of childbearing age (18-45) who served in OEF/OIF and used VA, 30% had received contraception from VA.¹² Adherence to hormonal contraception among women Veterans is poor.¹³
- Women Veterans with mental illness and substance use disorders had lower contraceptive adherence and more gaps in contraceptive coverage than those without these conditions.¹⁴
- Virtually all VA medical facilities offered onsite prescription and management of hormonal contraception, whereas 63% offered placement of intrauterine devices back in 2000. Sites with onsite gynecologists and/or clinicians with women's health expertise in hospital-based clinics (vs. community-based) were more likely to offer onsite contraception.¹⁵

⁶ Katon JG, Cyle Y, Raza M, et al. Self-reported infertility among male and female Veterans serving during OEF/OIF. *J Womens Health.* 2014;23(2):175-183.

⁷ Mattocks K, Kross-Desrosiers A, Zephyrin L, et al. Infertility care among OEF/OIF/OND women Veterans in the Department of Veterans Affairs. *Med Care.* 2015;53(4 Suppl 1):S68-S75.

⁸ Mattocks KM, Frayne S, Phibbs CS, et al. Five-year trends in women Veterans' use of VA maternity benefits, 2008-2012. *Women's Health Issues.* 2014;24(1):e-37-e42.

⁹ Mattocks KM, Skanderson M, Goulet JL, et al. Pregnancy and mental health among women Veterans returning from Iraq and Afghanistan. *J Womens Health.* 2010;19(12):2159-2166.

¹⁰ Katon JG, Washington DL, Cordasco KM, et al. Prenatal care for women Veterans who use Department of Veterans Affairs health care. *Women's Health Issues.* 2015;25(4):377-381.

¹¹ Katon JG, Mattocks K, Zephyrin, L, et al. Gestational diabetes and hypertensive disorders of pregnancy among women Veterans deployed in service of operations in Afghanistan and Iraq. *J Womens Health.* 2014;23(10):792-800.

¹² Goyal V, Mattocks K, Blmla Schwartz E, et al. Contraceptive provision in the VA healthcare system to women who report military sexual trauma. *J Womens Health.* 2014;23(9):740-745.

¹³ Borrero S, Zhao X, Mor MK, et al. Adherence to hormonal contraception among women Veterans: Differences by race-ethnicity and contraceptive supply. *Am J Obstet Gynecol.* 2013;209(2):103.e1-11.

¹⁴ Callegari LS, Zhao X, Nelson KM, Borrero S. Contraceptive adherence among women Veterans with mental illness and substance use disorder. *Contraception.* 2015;91(5):386-392.

¹⁵ Cope JR, Yano EM, Lee ML, Washington DL. Determinants of contraceptive availability at medical facilities in the Department of Veterans Affairs. *J Gen Intern Med.* 2006;21 Suppl 3:S33-S39.