Pain Management for Primary Care

Series: Eighteen
Women and Pain

Module 18–1
Women Pain Related Issues

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Women Pain Related Issues

By the end of the module, you will be able to:

- Describe changes in the female Veteran and Active Duty population.
- Identify impacts of pain on Veteran, OEF/OIF Veteran, and non-Veteran females.
- Identify risks for pain in Active Duty and Veteran females.
- Explain causes for common pain syndromes in women such as musculoskeletal and service related pain.

We will review:

Topic One: Pain Risks in Women

Topic Two: Women Veteran Pain Studies

Topic Three: Pain Syndromes among Women

Topic Four: Approach to Women with Chronic Pain

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Topic One

Pain Risks in Women

Veteran women are at higher risk for pain.

- Pain is more common in Women, particularly headaches, oral facial pain, musculoskeletal pain, and abdominal pain.
- Women suffer from a higher prevalence of depression, anxiety, and adjustment disorders.
- There are high injury rates in basic training and active duty
- Higher rate of sexual trauma (18 % screen positive, MST FY2010 data OIF/OEF).

Notes

Are women Veterans at higher risk than men?

OIF (Operation Iraqi Freedom) indicates deployment to Iraq and OEF (Operation Enduring Freedom) indicates deployment to Afghanistan

259 Women, 249 Men
Women reported greater pain intensity
BPI Severity 6.2 vs. 5.2 (P<.001)
Greater pain specific disability

BPI interference 6.47 vs. 5.27 (P<.001)
More pain related disability days
32.5 vs. 23.4 (P<.001)
More likely to acknowledge emotional aspects of pain and expressed a greater need for empathy

Depression is twice as common among women than men.

- Half of women suffering from pain also suffer from depression resulting in poor response to treatment and overall poor health.
- The presence of depressive symptoms is a strong, independent, and highly prevalent risk factor for the occurrence of disabling back pain.

Mental health diagnosis	Women (n=40,701)	Men (n=288,348)
Depression	23%	17%
PTSD	17%	22%
Substance Use	2%	3%
Adjustment Disorder	11%	11%
Anxiety	12%	10%
Alcohol Use	3%	8%
Eating Disorder	0.6%	0.1%

Notes

Stepped Care for Affective Disorders and Musculoskeletal Pain (SCAMP) study data

BPI (Brief Pain Inventory) scales - BPI Interference and BPI Pain SeverityThe BPI Pain Severity: assesses pain at its 'worst,''least,' 'average,' and 'now'.The BPI Pain Interference: measures how much pain has interfered with daily activities like general activity, walking, work, mood, enjoyment of life, relationships, and sleep.

Reference for Military Sexual Trauma (MST) FY2010 Data

More women serve in the front line, under direct 'fire.'

- Women soldiers carry heavy loads and participate in strenuous physical training.
- Have higher injury rates than men in initial entry training in military service.
- Women are particularly prone to specific injuries such as stress fractures.
- Gear is heavy (kevlar helmets 3-4 lbs, vests are 20-30 lbs).

Notes

DOD studies have identified specific risk factors for injury (low aerobic fitness and previous injury history) and targeted strategies to strengthen bones and reduce risk of stress fracture in basic training.

Additional DOD studies of physical strength demands have led to new helmet design, evaluation of spine load lifting tolerance, and further testing of whether strength deficiencies are associated with injury risk.

There are many reasons for chronic peripheral neuropathy.

Risk factors to develop stress fracture include

- Poor nutrition status
- Low level of aerobic fitness
- Rapid progression of intensity and duration of exercise
- Advanced Age
- History of stress fracture

Up to 1 in 4 women report sexual trauma in the military.

	Females		Males	
	FY2009	*FY2013*	*FY2009*	*FY2013*
% Screened Positive	21.9%	24.3%	1.1%	1.3%
# Screened Positive	53,295	77,681	46,800	57,856

Military Sexual Trauma (MST) Data provided by the Office of Mental Health Services' Military Sexual Trauma Support Team

Notes

This chart shows the number of Veterans who screened positive for history of sexual trauma in 2009 and 2013. As sexual trauma may increase pain, this table demonstrates the number of veterans that may be effected.

Military Sexual Trauma (MST) Data provided by the Office of Mental Health Services' Military Sexual Trauma Support Team

FY2010 Data increases to 22.4% of all female Veteran VHA users with a positive screen for MST and 1.2% of males.

OEF/OIF/OND – 18.

Sexual trauma increases the risk for chronic pain.

Women with a history of sexual trauma have higher rates of pain syndromes such as:

- Pelvic pain
- Gastrointestinal disorders
- Headache
- Back pain

Women report:

- More severe pain
- More frequent pain
- Longer durations of pain
- More pain-related disability

Despite this, women are at risk for under-treatment.

Notes

Study of Women Veterans receiving outpatient primary care.

- N=213 women presenting for routine appointments to VA Connecticut Women's Health Center between OCT 2004 and MAR 2005.
- Self-administered questionnaire of 59 questions.
  - 78% reported ongoing pain problem
  - 36% reported any sexual trauma

In multivariate linear regression that included only those who reported pain.

- The presence of sexual trauma was associated with higher levels of pain intensity and higher levels of pain interference.

Knowledge Check

Evidence supports women who have been sexually traumatized are more likely to suffer from pelvic pain, _____, _____, and gastrointestinal disorders.

a. Fibromyalgia; Hip Pain

b. Fibromyalgia; Headaches

c. Headaches; Back pain

d. Hip Pain; Shoulder Pain

Knowledge Check – Answer

Evidence supports women who have been sexually traumatized are more likely to suffer from pelvic pain, _____, _____, and gastrointestinal disorders.

a. Fibromyalgia; Hip Pain

b. Fibromyalgia; Headaches

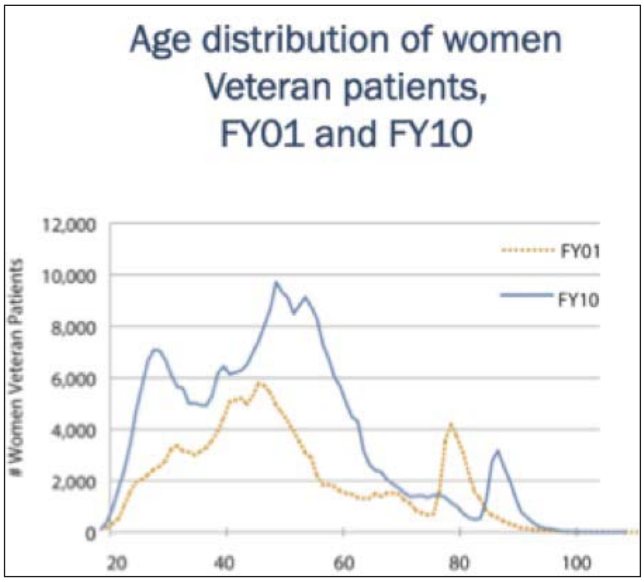
c. Headaches; Back pain

d. Hip Pain; Shoulder Pain

Topic Two
Women Veteran Pain Studies

Sources: Women's Health Evaluation Initiative (WHEI) and the Women Veterans Health Strategic Health Care Group. Sourcebook: Women Veterans in the Veterans Health Administration V1: Sociodemographic Characteristics and Use of VHA Care, 2011. VHA Office of Finance Allocation Resource Center (ARC).

The number of women seeking care has increased dramatically.



Source: Women's Health Evaulation Initiative and VHA Women's Health Services. Sourcebook: Women Veterans in the Veteran's Health Administration. Volume 2. Sociodemographics and Use of VHA and Non-VA Care Fee. 2012.

Notes

Over 2.2 million women Veterans in the U.S.

Over 390,000 utilized Veterans Health Administration (VHA) health care services in FY 2013.

Women Veterans using VHA services have been increasing 7% per year which results in a 60% growth of women Veterans using VHA between FY 2009 and FY 2015.

Care is provided to women Veterans at 151 medical centers and 985 outpatient clinics.

Most pain of returning OEF/OIF veterans is musculoskeletal.

Diagnosis	Female N=19,520	Male N=144,292	Adjusted OR (95% CI)
Back Problems	9.4%	10.3%	0.97(0.92,1.02)
Joint Disorders	9.2%	9.5%	1.00(0.95,1.05)
PTSD	8.4%	9.7%	0.95(0.89,1.0)
Mild Depression	6.8%	4.1%	1.81(1.70,1.93)
Female Reproductive Health	6.2%		
Musculoskeletal Disorders	4.6%	4.1%	1.22(1.13,1.31)

Haskell, S.G., Mattocks, K., Goulet, J.L., Krebs. E. E., Skanderson, M., Leslie, D., ...& Brandt, C. (2011).

Notes

Observational Study of 163,812 returning OIF/OEF Veterans who had enrolled in the VA and had at least one visit within 1 year of their last deployment.

Longitudinal cohort study.
Musculoskeletal injuries were 50.4%; Psychiatric disorders were 23.3%. Breakdown of psychiatric DNBIs by gender was not available in the article.

One study of disease and nonbattle injuries (DNBI) sustained by a U.S. Army Brigade Combat Team (BCT) during OIF

- Historically DNBI has resulted in significantly more hospitalizations and time lost than battle injuries as a result of the hostile combat environment.
- Longitudinal cohort study of one US Army BCT (3,797 males, 325 females) deployed to Iraq for 15 months.
- Higher rates of DNBI for female soldiers.
  - Accounted for 7.9% of population and 12.5% of DNBI
  - 10.8% of females were lost to theatre operations due to female reproductive DNBI.
    - 74% of all female DNBIs receiving MEDEVAC were for pregnancy related issues.
- Musculoskeletal injuries were the most common body systems involved (50% for the group)
  - No gender-related significant difference existed for soldiers receiving MEDEVAC for musculoskeletal injuries.

Prevalence and Age-Related Characteristics of Pain in a Sample of Women Veterans Receiving Primary Care

- 213 Women Primary Care Patients; Mean age 52
  - 78% reported ongoing pain problem
  - Mean duration of pain 6 years
  - Average pain intensity 6.3 (range 1-10)
- Commonly endorsed pain sites included:
  - Lower extremity(68%)
  - Low back(63%)
  - Shoulder (48%)
- Highest prevalence in age 36-50 (89%), and 51-65 (83%)

Health Related Quality of Life in VA Patients with Mental Illness

- Another study of health related quality of life in over 18,000 veterans with mental illness.
  - Female veterans with serious mental illness had lower scores on the SF-36 physical component summary (indicating worse symptoms), were more likely to report that they were limited "a lot" in activities of daily living, and had more pain than males.

Topic Three
Pain Syndromes Among Women

Fibromyalgia and headaches are predominantly prevalent in females.

- The prevalence of fibromyalgia is 1.2% with a female to male ratio of 4.8:1.
- Migraines are three times more common in females, peaking between 18-29 year olds
- Tension Type Headaches has a 1.16:1 ratio
- Temporomandibular Joint Pain (TMJ) is 1.2-1.9:1
- Trigeminal Neuralgia F:M ratio is 3:2
- Only cluster Headaches are are more common in men.

Notes

Prevalence and female to male ratios vary depending on classification criteria used.

1990
Prevalence 1.7% (95%CI: 0.7-2.8%)
Female/male ratio 13.7

2010
Prevalence 1.2% (95%CI:0.3-2.1%)
Female/male ratio 4.8

Modified 2010
Prevalence 5.4% (95%CI: 4.7-6.1%)
Female/male ratio 2.3

Over 60% of women have more than one cause for pelvic pain.

- First rule out sexual trauma, which is common.
- Other common etiologies are for pelvic pain are:
  - Endometriosis
  - Peritoneal adhesions
  - Irritable bowel syndrome
  - Interstitial cystitis

Notes

Military and other types of sexual trauma are common in the women veteran and military populations.
Sexual trauma is associated with pelvic pain and other forms of chronic pain.
In patients with pain, a history of sexual trauma is associated with greater pain severity and pain-related interference.

Women want:

- Personalized care
- To be taken seriously
- To be reassured (Price, et al. Br J Ob GYN. 2006;113: 446-52)

In patients for whom a specific diagnosis is not made, a multidisciplinary approach addressing dietary, social, environmental, and psychological factors has been shown to improve outcomes over medication alone. (Ortiz, Am Fam Physician 2008;77:1535-42)

A Multi-disciplinary/Interdisciplinary approach incorporates the knowledge and skills of a number of healthcare providers in a collaborative environment for a comprehensive approach to pain management.

A multi-disciplinary team may include members from a number of different specialties working together i.e. General Medicine, Physiatry, Pain Management, Psychology, Psychiatry, Physical and Occupational Therapy, Acupuncture, Chiropractic Care, Massage Therapy, Yoga Therapy.

Interstitial Cystitis

- AKA Painful bladder syndrome.
- 5:1 female to male ratio in study of Kaiser Permanente Northwest enrollees from 1998-2002.

Irritable Bowel Syndrome

- Functional gastrointestinal disorder involving abdominal pain and diarrhea, constipation, or both.
  - 12.1% Prevalence in Females
  - 6.7% Prevalence in Males
  - Peak age 25-44

Topic Four
Approach to Women with Chronic Pain

Despite women suffering from more pain, they are frequently under treated.

- Women seek care for pain more often than men.
- Women face challenges of stigmatization, misunderstanding, and gender bias.
- Women respond differently to pain treatment plans.
- Take complaints seriously, reassure patients, and offer personalized care.
- Most conditions require a multimodal treatment and team approach.

Notes

Some VA and Military Providers have more experience caring for men

Women and men have different communication styles

Raises possibility for gender bias in pain treatment

Understand the different needs of women throughout the life cycle.
Understand that the psychosocial needs of women may be different than their male counterparts.
Communication needs of women are important to address at each visit.
Differences in mental health comorbidities may play an important role in pain care decisions.

Recall the unique psychosocial needs of women:

- Always consider risk of sexual trauma and understand the service related injury.
- Perimenstrual pain syndrome may worsen headache, back, and pelvic pain as well as change the emotional response to pain.
- Preconception counseling is important when considering the use of pain medication.
- During pregnancy, hormonal changes may increase pain and family related stress.
- Perimenopausal women have an increased risk for insomnia, depression and stress.
- Menopause and changes in weight may predispose to worsening arthritis and aging.

Notes

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The impact of hormonal changes can play a role in pain intensity and treatment options.
Increase stress related to family responsibilities.
Perimenstrual pain syndromes – headache, back pain, pelvic pain.
    Change in drug and medication levels
    Emotional Response to Pain

Preconception counseling is important for all women in this age group.
Medication Use
Potential Worsening of Pain during Pregnancy
General Health Maintenance issues
The risk of sexual trauma – Military or Lifetime
Risk of Service Related Injury
Changes in weight that may impact pain.
Hormonal changes that may increase risk of musculoskeletal pain.
Increased psychosocial needs related to children, aging parents and spouses.
Increased risk of insomnia.
Impact of hot flashes on sleep and sense of well being.
Possible increased risk of depression.
Increased risk of degenerative arthritis related to chronic joint or back pain.
Increased risk of medication induced pain eg. Aromatase Inhibitors, Statins.
Increased risk of medical comorbidities that can increase pain and complicate treatment options.
Service related injury may progress to Chronic Pain.
Changes in weight that may impact pain.
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Increased risk of medical comorbidities that can increase pain and complicate treatment options.
Service related injury may progress to Chronic Pain.

Summary

Recall that Female Servicemembers and Veterans are at risk for more frequent disabling pain due to service injury, depression, and female-specific pain syndromes (headaches, fibromyalgia, pelvic pain).

Always consider sexual trauma.

Women are at risk for under-treatment. Take complaints seriously and personalize care.

Feel confident to work in a team that uses behavioral, integrative, and mind-body treatments.

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