Women Veterans Research

Elizabeth Yano, PhD & Lori Bastian, MD

VA Women’s Health Research Network
Background
Why a Focus on Women Veterans Research?
Why Women Veterans Research?

- Historically under-studied, under-represented
  - Hard to include enough women in studies
- Distinct health care needs and experiences
  - Access, use and quality of care differ
- Many more women serving in the military
  - #s using VA have doubled over past decade
  - Improving access Secretary-level priority
- Increased demand for research to inform practice and policy for the future
Early Milestones...building the foundation

- VA mandates that all VA research studies include women veterans (response to PL 98-160)
- 1983: 1st early WH studies begun (needs, care, gender differences)
- 1992: 1st HSR&D WH research solicitation → funds 3 studies
- 1993: 2nd HSR&D WH research solicitation → funds 5 studies
- 1996: 3rd solicitation, 1st WH-focused CDAs funded
- 2000: 1st systematic literature review on WVs
- 2004: 1st VA women’s health research agenda
- 2004: 3rd solicitation, 1st WH-focused CDAs funded
VA Women’s Health Research Agenda (2004)

- Target key conditions
  - Mental health, chronic pain, diabetes, substance use
- Target special populations
  - Pregnancy, military exposures, homeless, OEF/OIF
- More research funded
  - Understand health care needs, access, barriers
  - Impacts of how VA care is organized
  - Needs among OEF/OIF women Veterans
VA Women’s Health Research Agenda (2004)

- **Build capacity (↑ # WH investigators)**
  - Improve networking, mentoring, collaboration

- **Address barriers and needs**
  - Enhance scientific review, new calls for research
  - Create a VA women’s health research network

- **Increase visibility/awareness**
  - Special journal issue focused on women veterans
  - Interest group and support for investigators
Number of VA Women’s Health Researchers (1990s)
Growth in # of VA Women’s Health Researchers (2004)
Huge Growth in # of VA Women’s Health Researchers (2010)
Huge Growth in # of VA Women’s Health Researchers (2010)

Now nearly 200 VA women’s health researchers nationwide
Women's Health Research Publications
Veterans and Women in the Military

"More articles in the past 5 years than in the previous 25 combined…"

VA Women’s Health Research Network

Where Do We Go From Here?
Barriers to VA research among women veterans remain

- Each VA has too few, too hard to recruit
  - Trouble getting #s to look at gender differences
- Researchers’ knowledge/talents vary
  - May not understand women veterans’ health needs or how they use care
    - Need to know how to adapt interventions to fit women veterans’ needs and experiences
  - May need help getting their research started
  - May need more training
Solutions

Women’s Health Research Consortium + Women Veterans’ Practice Based Research Network
VA Women’s Health Research Network

Coordinating Center (Palo Alto) & Consortium Hub (Los Angeles)

Makes multisite research easier
- Overcomes problem of small #s
- Makes it easier to include women

4 inaugural sites
10 + more sites interested
VA Women’s Health Research Network

Palo Alto

Coordinating Center (Palo Alto) & Consortium Hub (Los Angeles)

Iowa City

Durham

Post-deployment health

Delivery models

Clinical trials

VA databases & health economics

Technical Support
- Statistics
- Qualitative methods
- Survey/IRB
- Implementation

4 inaugural sites

10 + more sites interested
Women Veterans Research Network

- First projects to use Network
  - Patient priorities for gender-specific care (Kimerling)
  - Gender sensitivity curriculum rollout (Vogt/Yee)
  - Women’s health provider needs assessment (Klap)

- Many projects in the “pipeline”...
  - Using peer support to improve maternity care coordination (Bastian & Mattocks)
  - Implementing tele-support to women seen in community-based outpatient clinics (Washington)
VA Women’s Health Services Research Conference (2010)

Setting a New Research Agenda for the Future
VA Women’s Health Research Conference (2010)

- Nearly 100 researchers representing 45 VA facilities, spanning 27 states
- Virtually every VA Office represented
- Extensive representation from outside VA
  - Departments of Health & Human Services (NIH, NIMH, AHRQ), Defense & Labor
  - Institute of Medicine, National Committee for Quality Assurance, Society for WH Research
  - Office of the Inspector General, Congressional Research Service, Congressional staff
VA Women’s Health Research Conference (2010)

- Office of the Secretary
- Office of the Under Secretary for Health
- Office of Patient Care Services
- Office of Mental Health Services
- Office of Nursing Services
- Office of Public Health & Environmental Hazards
- Office of Academic Affiliations
- Office of Research & Development
- Office of Rural Health

- Center for Women Veterans
- VA Homeless Program
- VA National Center for PTSD
- Office of the Asst Sec of Defense (Health Affairs)
- Triservice Nursing Research Program
- Congressionally Directed Medical Research Programs (CDMRP)
- Defense Centers of Excellence for Psychological Health & TBI
- Tricare Regional Offices
New VA Women’s Health Research Agenda

- Access to care and rural health
- Primary care and prevention
- Mental health
- Post deployment health
- Complex chronic conditions/aging/long term care
- Reproductive health

www.whijournal.com/supplements (Yano, Bastian, et al., 2011)
Long Journey…but now rapid progress

Major contributions by VA HSR&D Service

1983
- VA mandates that all VA research studies include women veterans (response to PL 98-160)

1992
- Early VA WH agenda-setting process begun using NIH criteria

1993
- 1st early WH studies begun (needs, care, gender differences)

1996
- 1st HSR&D WH solicitation → funds 3 studies

2000
- 2nd HSR&D WH research solicitation → funds 5 studies

2004
- 3rd solicitation, 1st WH-focused CDAs funded

2010
- WH research agenda, 1st syst review, WH scientific review board, special journal issue, WH research interest group

2011
- VA Women’s Health Research Network, special journal issue
- WH research portfolio, WH Research Network, VA WH research conference, Vietnam WV study

1992-2010
- Major contributions by VA HSR&D Service

1983-2011
- Timeline of key events
New VA Journal Supplement to Women’s Health Issues
Disseminating New Knowledge
VA Journal Supplement to Women’s Health Issues (Jul 2011)

- Health & Health Care of Women Veterans and Women in the Military
  - 18 research articles, 3 commentaries, editorial
  - New VA women’s health research agenda (Yano et al)
  - Updated literature review (Bean-Mayberry et al)
  - How to do intervention research guide (Rohrer et al)

[www.whijournal.com-supplements](http://www.whijournal.com-supplements)
New Women Veterans in the VHA: A Longitudinal Profile

- Research Question: What are the characteristics of women veterans joining the VA for health care?

- Methods:
  - Examination of outpatient visits at VHA from FY 2003-2009.
  - New patients has not used the VHA in the prior 3 years.

www.whijournal.com/supplements (Friedman, et al., 2011)
New Women Veterans using VHA

- Nearly 2/3 of new VA users are less than 45
- 43% carry service-connected disabilities
- 88% received primary care services
- 40% used mental health services
  - The majority of women using mental health services made 3 or more visits in one year

www.whijournal.com/supplements (Friedman, et al., 2011)
New Women Veterans using VHA

- Large influx of new patients (some facilities had close to 1,000 women joining in a single year)
- Younger women will require more emphasis on post-deployment services
- What should be done to make facilities more accessible to women?

www.whijournal.com/supplements  (Friedman, et al., 2011)
Intimate Partner Violence Victimization Among Women Veterans and Associated Heart Risks

- Examined two public health issues in women: cardiovascular disease and intimate partner violence (IPV)
- CDC study of 21,162 women, including 503 women veterans
- Examined IPV in veterans and non-veterans
- Examined the relationship between IPV and heart health risk factors in women

www.whijournal.com/supplements  (Dichter et al. 2011)
Intimate Partner Violence Victimization Among Women Veterans and Associated Heart Risks

- About one third of veterans reported IPV during their lifetime, compared with fewer than one quarter of non-veterans

Table 2. Association Between Veteran Status and Lifetime IPV Victimization

<table>
<thead>
<tr>
<th></th>
<th>Non-Veteran (n = 20,659)</th>
<th>Veteran (n = 503)</th>
<th>Adjusted OR (95% CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>4,975</td>
<td>171</td>
<td>1.6 (1.1, 2.6)</td>
</tr>
<tr>
<td>%</td>
<td>23.8</td>
<td>33.0</td>
<td></td>
</tr>
</tbody>
</table>

Abbreviations: CI, confidence interval; IPV, intimate partner violence; OR, odds ratio.

* Controlling for age, race, income, and education.

[Dichter et al. 2011](www.whijournal.com/supplements)
Relationship between IPV and Heart Health Risks

- IPV is associated with increased heart health risk, including depression, smoking, and heavy or binge drinking

Table 3. Association Between Heart Health Risk Factors and Lifetime IPV Victimization

<table>
<thead>
<tr>
<th></th>
<th>Non-Veterans</th>
<th>Veterans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IPV (n = 4,975)</td>
<td>IPV (n = 171)</td>
</tr>
<tr>
<td></td>
<td>No IPC (n = 15,684)</td>
<td>No IPV (n = 332)</td>
</tr>
<tr>
<td>Depression</td>
<td>25.1*%</td>
<td>12.8%</td>
</tr>
<tr>
<td>Smoking</td>
<td>37.6*%</td>
<td>28.2%</td>
</tr>
<tr>
<td>Binge or heavy drinking</td>
<td>15.2*%</td>
<td>18.7%</td>
</tr>
<tr>
<td>Lack of exercise</td>
<td>27.9%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Overweight or obese</td>
<td>56.8%</td>
<td>66.4**%</td>
</tr>
<tr>
<td></td>
<td>54.6%</td>
<td>48.5%</td>
</tr>
</tbody>
</table>

- Comparing heart health risk factors by IPV exposure, separately for veterans and non-veterans.  
  * p < .05,  ** p < .01.

www.whijournal.com/supplements  (Dichter et al. 2011)
Homelessness and Trauma Go Hand-in-Hand: Pathways to Homelessness Among Women Veterans

- Three Focus Groups in Los Angeles
- 29 women veterans
  - Mean age 48 (32-68)
  - 46% African-American
  - Majority are single, divorced or separated

www.whijournal.com/supplements (Hamilton et al., 2011)
Pathways to Homelessness

- 5 precipitating experiences:
  - 1) childhood adversity
  - 2) trauma and/or substance abuse in military
  - 3) post-military adversity
  - 4) post-military mental health or medical issues
  - 5) unemployment

- Other contextual factors:
  - Lack of social support and resources
  - Barriers to receiving health care

www.whijournal.com/supplements (Hamilton et al., 2011)
Pathways to Homelessness

- Their stories:

“I had no problems [for 15 ½ years] until I got to this particular company….and it was all guys. I started going through the same thing with them that I was going through in the military. So I lost my job. I couldn’t deal with the male authority figure any more”

www.whijournal.com/supplements (Hamilton et al., 2011)
Pathways to Homelessness

“Part of the reason that I went into the military was to be like a safe haven for me. And then after I encountered the same type of abuse in the military, it was no longer safe for me and I had thought that that could have [been] my home away from home. Then that’s when I started with the alcohol and stuff when I was in the military because I was just lost…..I didn’t report [the abuse]…..So that left me kind of numb. And when I got out of the military, the same things started to happen all over again.”

www.whijournal.com/supplements  (Hamilton et al., 2011)
VA Journal Supplement to Women’s Health Issues (Jul 2011)

- Tailored PC → ↑ ratings of VA provider skill & gender appropriateness (Washington et al)
- VA users more likely to have served in combat area, have PTSD diagnosis, ↓ physical health (Mengeling et al)
- About half of VA’s offer mental health care arrangements specifically for women (Oishi et al)
  - Separate clinics or groups, designated providers
- Variations reflect provider & patient issues (MacGregor et al)

www.whijournal.com/supplements
VA Journal Supplement to Women’s Health Issues (Jul 2011)

- Satisfaction with VA care high among women and men with histories of MST (Kimerling et al)
- Deployment to theater of operations → greater physical health problems (Pierce et al)
- Measurement of WV combat exposure (Sternke)
- PTSD severity associated with ↓ job function, ↓ satisfaction, but not job status (Schnurr et al)
  - Depression has substantial effects for work-related quality of life, independent of PTSD symptoms

www.whijournal.com/supplements
VA Journal Supplement to Women’s Health Issues (Jul 2011)

- Less aggressive lipid-lowering therapy among women Veterans (Vimalananda et al)
  - VA makes ↓ gender disparities performance measure

- Women Vets smoke more than men (Farmer et al)
  - But are more likely to be advised to quit, equally likely to be offered smoking cessation meds

- Women with mental illness less likely to receive recommended breast cancer screening (Yee et al)

- Experiences and exposures to TBI (Iverson et al)

www.whijournal.com/supplements
VA Implementation of Research into Practice

- Importance of accelerating delivery of evidence-based practice
  - Large number of clinician researchers
  - Active engagement in wide array of research
  - VA leaders and managers as active partners

- Unusual degree of communication “upward”
  - Women Veterans Health Strategic Healthcare Group, Center for Women Veterans, Advisory Committee for Women Veterans, VA Central Office briefings
Example of Research into Practice

CSP #494: Cognitive-Behavioral Treatment of PTSD in Women

The Science
- 1st clinical trial of PTSD treatment in female Veterans and Service Members
- 12 sites; 284 women
- Prolonged Exposure (PE) therapy shown to be effective (JAMA, 2007)

The Translation
- National rollout of PE implemented in 2008
- >1,000 clinicians trained
- Infrastructure created to sustain implementation
- Research to enhance efficiency, outcome, and acceptability

Schnurr PS et al
National Center for PTSD
Example of Research into Practice
Research to Enhance the Care of Women Veterans

Caring for Women Veterans study:
- Evaluate a 30-minute multi-media program for enhancing VA staff sensitivity to and knowledge about women Veterans and their needs
- Supported by new Practice-Based Research Network

Vogt D, Boston VA, National Center for PTSD
Yee E, Albuquerque VA
Example of Research into Practice

Impact of Practice Structure on Quality of Care for Women Veterans

- Women’s clinics
  - Higher patient ratings of access, continuity, coordination
  - Higher breast and cervical cancer screening rates

- General PC clinics
  - Better gender-neutral care (CRC screening diabetes, flu shots)

New VHA Handbook for Women’s Health Care

Yano EM, Bean-Mayberry B, Washington DL
VA Greater Los Angeles
For more information
Elizabeth M. Yano, PhD elizabeth.yano@va.gov
Lori Bastian, MD, MPH lori.bastian@va.gov
Susan Frayne, MD, MPH susan.frayne@va.gov