



# Deployment Stressors Unique to Women

COL Jennifer Chow, MD

Deputy Director of Psychological Health

Air Force Medical Readiness Agency















#### **Disclosures**



- ■The views expressed in this presentation are those of the author and do not necessarily reflect the official policy or position of the Department of Defense, nor the U.S. Government.
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- COL Chow and AFMRA staff have no financial interests to disclose. Commercial support was not received for this activity.
- No conflict of interest.
- No discussion of non-FDA-approved medications or devices.
- Case presentation is a composite with no personal identifiers.

# **Biography**



#### **COL Jennifer Chow**

COL Chow has been an Air Force (AF) psychiatrist since 2000 when she started her psychiatric residency at Wilford Hall at Lackland AFB. She has been stationed in South Korea, Germany, the United Kingdom, Turkey, and deployed to Kabul, Afghanistan in 2012-2013. Currently she is the Deputy Director of Psychological Health for the AF, since 2019, which is the advisor to the AF surgeon on mental health policy and strategy for the AF.

# Agenda



- Overview/History of Women in Military Deployments
- Practical Considerations for Women Deploying
- Risk Factors for Mental Health Disorders, Gender differences in Developing MH Disorders

### **Learning Objectives**



At the end of the presentation, you will be able to

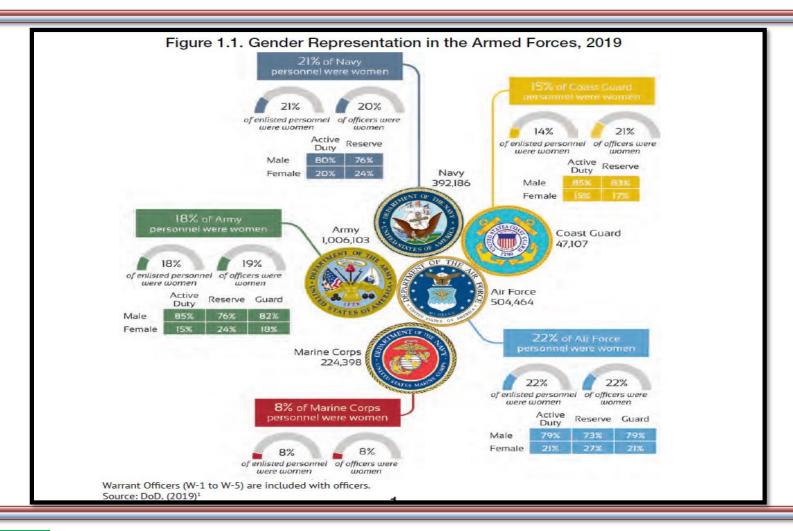
- Describe risk factors for developing mental health disorders that are unique to women
- Identify common deployment stressors specific to women



# Overview and History of Women in Military Deployments

# Women in the Military





#### **Women in Combat Roles**



- ■653 women serving in combat roles in Army a/o Oct 2019
- 19 submarine crews integrated with women a/o Dec 2019
- ■5 female secretaries of AF, more female general officers than any other service
- ■231 female Marines serving in combat arms billets a/o Dec 2019
- None of the traditional SOF units are integrated (Green Berets, Navy SEALs, Marine Raiders, AF special tactics)

Moore, 2020

# Women in Combat Roles: Stressors Disproportionately Affecting Female Service Members



- Relocation stress due to unsafe housing
- Translating children's education across states
- Spouse's unemployment
- Dual-military relationship creating difficult choices
- Difficulty having a family
- Feeling that pregnancy is discriminated against



Photo: Cpl. Rachel Mendieta

Moore, 2020

# Female Service Members who Have Deployed



202,849 Female Service members (AD)

- ■144,980 have not deployed
- ■57, 869 have deployed

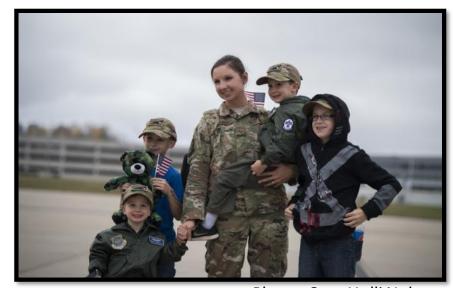


Photo: Capt Holli Nelson

Stahlman, et al, 2017

# **Women in Military Deployments**



#### **Current Statistics of Women in Combat Zones**

- ■58.8% of women reported combat exposure, 34% of females reported high combat exposure (5+ experiences)
- ■65.8% of males reported combat exposure, 47.5% of males reported high combat exposure (5+ experiences)
- 22.9 % of women reported deployment-related injuries vs 28.4% of men

(DoD HRBS 2015)

### **Women in Military Deployments**



- Role of women in the military has expanded
- Most occupations include combat support roles

### **Pre-Deployment Risk Factors**



- Adverse Childhood Events (ACE)
  - ☐ Women with military Service report greater ACEs than those without Service history
  - ☐ Female Veterans reported higher ACE scores than female non-Veterans

(McCauley et al, 2015)

#### **Baseline Rates of Mental Illness**



#### **Females**

- Substance use disorders 1.6%
- Adjustment disorders 11.2%
- Depressive disorders 6.0%
- PTSD 2.7%
- ■Anxiety disorders 6.5%
- Any mental health related problems 15.7%

#### Males

- Substance use disorders 2.2%
- Adjustment disorders 5.3%
- Depressive disorders 2.7 %
- PTSD 1.2%
- ■Anxiety disorders 2.8%
- Any mental health related problems 11.5%

(Armed Forces Health Surveillance Branch, 2020)

#### **Poll Question #1**



If you have been deployed, what are some stressors unique to women that you/fellow Service women have experienced?



# Practical Considerations for Women Deploying

# Deployment Stressors: Gynecological/reproductive issues



- Menstruation and menstrual management
- Menstrual suppression
- Lack access to OB-GYN
- ■Increased maternal morbidity in female Veterans

(Combellick et al, 2020)



- **■** Bathrooms
- ■Hygiene



- Body Armor
- Heavy Equipment



photo: Maj. Cory Angell

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- Pre-deployment stressors & reintegration
- ■24/7 "fishbowl": friendships with both men and women
- ■Blending/fitting in



Photo: Maj Michelle Lunato



- ■Infertility, increased risk of hysterectomy and Sexually Transmitted Diseases (STDs)<sup>1</sup>
- ■Unintended pregnancy 60% rate<sup>1</sup>
- ■Spontaneous preterm birth: 11.7% among females who delivered within 6 mos of return from deployment vs. 6% female soldiers who had not deployed (PTSD nor multiple past deployments not associated with increased SPB risk)<sup>2</sup>

(Van den Berk Clark et al, 2018; Shaw et al, 2018)

# Deployment Stressors: Sexual Assault / Harassment



|                           | Study<br>Sample<br>(n = 1,262) | No Sexual<br>Stressor<br>(n = 11,900) | Sexual<br>Harassment<br>(n = 1,089) | Sexual<br>Assault<br>(n = 121) | Both SA<br>& SH<br>(n = 152) |
|---------------------------|--------------------------------|---------------------------------------|-------------------------------------|--------------------------------|------------------------------|
| Non<br>deployed           | 79.6%                          | 80.7%                                 | 70.2%                               | 72.7%                          | 67.8%                        |
| Deployed<br>W/O<br>Combat | 11.4%                          | 11.4%                                 | 10.9%                               | 14.1%                          | 11.2%                        |
| Deployed<br>W/<br>Combat  | 9.0%                           | 7.9%                                  | 18.9%                               | 13.2%                          | 21.1%                        |

(LeardMann et al, 2013)



■38.4% of female Veterans report MST (when including harassment and assault)

■23% of female Veterans report h/o assault

■52% report harassment

(Wilson, 2018)



#### Female Veteran study, n= 330

- Women who experienced deployment related SA had 6 times the odds of developing PTSD over those who had not experienced deployment related SA
- However, no interaction between SA and combat exposure in predicting PTSD

(Gross et al, 2018)

# **Deployment Stressors: Suicide**



Across deployment status, suicide attempts were more likely among soldiers who were women (currently deployed: OR = 3.4; 95% CI, 3.0-4.0"

- previously deployed: OR = 1.5; (95% CI, 1.4-1.7)
- ■and never deployed: OR = 2.4; (95% CI, 2.3-2.6)

(Ursano et al, 2016)

# Effects of Deployment: Mental Health



- Results from studies that examine gender differences and PTSD suggest that female Service members are at a higher risk for post-deployment PTSD than male Service members
- Results from female Veterans studies show a significant predictive relationship between deployment-related traumatic stressors, most notably combat experiences and sexual assault and sexual harassment, and PTSD outcomes

(Crum-Cianflone & Jacobson, 2014; Maguen et al, 2012)



- Deploying as individual augmentees, females are at increased risk than males for depression, probable PTSD and binge drinking¹
- Traumatic Brain Injury (TBI): females report more neurobehavioral symptoms with mild TBI (mTBI), and female Veterans with TBI are more frequently diagnosed with depression<sup>2</sup>



Photo: Sgt Ashley Bell

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#### **Poll Question #2**



What are some additional stressors that women experience while deployed that have not been covered in this session?

#### **DACOWITS**



Defense Advisory Committee on Women in the Services

- Established in 1951
- Recommendations on matters and policies relating to the recruitment of Service women in the US Armed Forces

(dacowits.defense.gov)

# DACOWITS 2019 Recommendations: Well-Being and Treatment- Child Care



The Secretary of Defense should allocate increased funding to address the lack of adequate child care capacity and on- and off-installation child care resources, to include construction/expansion of child care facilities and initiatives to ensure sufficient child development center staffing and family child care home providers.

The Secretary of Defense should review and revise the eligibility priority system for Child Development Centers detailed in DoDI 6060.02 (Child Development Programs) to ensure increased priority is afforded eligible Service members to improve availability and reduce waitlist time.

# DACOWITS 2019 Recommendations: Well-Being and Treatment – Domestic Abuse



The Secretary of Defense should expand DoDI 6400.06 (Domestic Abuse Involving DoD Military and Certain Affiliated Personnel) to include dating partners in the collection of domestic abuse data affecting Service members.

The Secretary of Defense should implement a means for Service members suffering from domestic abuse to establish immediate and convenient access to resources and assistance, similar to the DoD Sexual Assault Prevention and Response program and "Safe Helpline" offered to military sexual assault victims.

The Secretary of Defense should establish a DoD policy that directs the Military Services to notify civilian enforcement immediately after a military protective order is issued for domestic abuse, and to solicit civilian law enforcement cooperation in assisting victims to obtain a civilian protective order and other related services.

# DACOWITS 2019 Recommendations: Well-Being and Treatment - Pregnancy



The Secretary of Defense should direct the Military Services to develop and implement policies that ensure a servicewoman's career is not negatively affected as a result of pregnancy.

The Secretary of Defense should commission a research project to identify and assess the potentially unique impacts on military mothers who are reintegrating into the family after deployments.

#### **Female Veterans in Congress**



Rep. Chrissy Houlahan: AF

Sen. Tammy Duckworth: Army

Sen Joni Ernst: Army

(1<sup>st</sup> female combat Veteran

in Senate)

Rep. Tuls Gabbard: Army

Rep. Mikie Sherrill: Navy

Rep. Elaine Luria: Navy

Sen. Martha McSally: AF



Photo: Petty Officer 2<sup>nd</sup> class Camilo E. Fernan

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#### **Referral Resources**







#### **Point of Contact**

COL Jennifer Chow, MD

Deputy Director of Psychological Health

Air Force Medical Readiness Agency