MEMORANDUM FOR SGVT
ATTN: KAREN L. WEIS

FROM: 59 MDW/SGVU

SUBJECT: Professional Presentation Approval

1. Your paper, entitled **Current Military Perinatal Mental Health Treatment Models** presented at **Perinatal Mental Health and the Military Family Identifying and Treating Mood and Anxiety Disorders, Book Chapter** with MDWI 41-108, and has been assigned local file #16094.

2. Pertinent biographic information (name of author(s), title, etc.) has been entered into our computer file. Please advise us (by phone or mail) that your presentation was given. At that time, we will need the date (month, day and year) along with the location of your presentation. It is important to update this information so that we can provide quality support for you, your department, and the Medical Center commander. This information is used to document the scholarly activities of our professional staff and students, which is an essential component of Wilford Hall Ambulatory Surgical Center (WHASC) internship and residency programs.

3. Please know that if you are a Graduate Health Sciences Education student and your department has told you they cannot fund your publication, the 59th Clinical Research Division may pay for your basic journal publishing charges (to include costs for tables and black and white photos). We cannot pay for reprints. If you are 59 MDW staff member, we can forward your request for funds to the designated wing POC.

4. Congratulations, and thank you for your efforts and time. Your contributions are vital to the medical mission. We look forward to assisting you in your future publication/presentation efforts.

LINDA STEEL-GOODWIN, Col, USAF, BSC
Director, Clinical Investigations & Research Support

*Partners in a high-performance health system, dedicated to excellence in global care*
1. The author must complete page two of the 59 MDW Form 3039 (this form):

   a) In Section 2, add the funding source for your study [e.g., 59 MDW CRD Graduate Health Sciences Education (GHSC) [SG5 O&M]; SG5 R&D; Tri-Service Nursing Research Program (TSNRP); Defense Medical Research & Development Program (DMRP); NIH; Congressionally Directed Medical Research Program (CDMRP); Grants; etc.]

2. Print your name, rank/grade, sign and date the form in the author's signature block or use electronic signature.

3. Attach a copy of the 59th MDW IRB or IACUC approval letter for the research related study. If this is a technical publication/presentation, state the type (e.g., case report, QA/QI study, program evaluation study, informational report/briefing, etc.) in the “Protocol Title” box of the 59 MDW Form 3039.

4. Attach a copy of your abstract, paper, poster and other supporting documentation.

5. Save and forward, via email, the processing form and all supporting documentation to your Unit Commander, Program Director or immediate supervisor for review/approval.

6. On page 2, have either your Unit Commander, Program Director or immediate supervisor:

   a) Print their name, rank/grade/title, sign and date the form in the approving authority's signature block or use electronic signature.

7. Contact the 59th CRD/Publications and Presentations Section at (292-7141) for instructions for submitting the request form.

8. The 59th CRD/Publications and Presentations Section will route the request form to clinical investigations and public affairs and forward you a final letter of approval or disapproval.

9. Once your manuscript, poster or presentation has been approved for a one-time public release, you may proceed with your publication or presentation submission activities, as stated on the 59 MDW Form 3039. [NOTE: For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.]

10. If your manuscript is accepted for scientific publication, please contact the 59th CRD/Publications and Presentations Section (292-7141). This information is reported to the 59 MDW/CC. All medical research or technical information publications/presentations must be reported to the Defense Technical Information Center (DTIC). See 59 MDWI 41-108, Presentation and Publication of Medical and Technical Papers for additional information.

   **NOTE:** All abstracts, papers, posters, etc., should contain the following disclaimer statement:

   "The views expressed are those of the [author(s)] [presenter(s)] and do not reflect the official views or policy of the Department of Defense or its Components."

   **NOTE:** All abstracts, papers, posters, etc., should contain the following disclaimer statement for research involving humans:

   "The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DoD 3216.02_AFI 40-402, Protection of Human Subjects in Biomedical and Behavioral Research."

   **NOTE:** All abstracts, papers, posters, etc., should contain the following disclaimer statement for research involving animals, as required by AFMAN 40-401_IP, The Care and Use of Laboratory Animals in DoD Programs:

   "The experiments reported herein were conducted according to the principles set forth in the National Institute of Health Publication No. 80-23, Guide for the Care and Use of Laboratory Animals and the Animal Welfare Act of 1966, as amended."
PROCESsING OF PROFESSIONAL MEDICAL RESEARCH PUBLICATIONS/PRESENTATIONS

TO: Clinical Research Division/SGVU
(59 MDW/SGVU)

FROM: Author's Name, Rank, Grade, Office Symbol
Karen L. Weis, Col (rel)

PROTOCOL NUMBER: FWH20120012H

PROTOCOL TITLE - [NOTE: For each new release of medical research or technical information as a publication/presentation, a new 59 MDW Form 3039 must be submitted for review and approval.]

Mentors Offering Maternal Support (M.O.M.S.): Building Resilient Families

1. TITLE OF MATERIAL TO BE PUBLISHED OR PRESENTED
Current military perinatal mental health treatment models

2. FUNDING RECEIVED FOR THIS STUDY? ☒ YES ☐ NO
FUNDING SOURCE: TSNRP

3. IS THIS MATERIAL CLASSIFIED? ☒ YES ☐ NO

4. IS THIS MATERIAL SUBJECT TO ANY LEGAL RESTRICTIONS FOR PUBLICATION OR PRESENTATION THROUGH A COLLABORATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA), MATERIAL TRANSFER AGREEMENT (MTA), INTELLECTUAL PROPERTY RIGHTS AGREEMENT ETC.? ☒ YES ☐ NO

NOTE: If the answer is "YES" then attach a copy to the Agreement to the Publications/Presentations Request Form.

5. MATERIAL IS FOR (Check appropriate box or boxes for approval with this request.)
☐ PUBLICATION/JOURNAL (List intended publication/journal)
Chapter in a book titled - Perinatal mental health and the military family identifying and treating mood and anxiety disorders

☐ PUBLICATION ABSTRACT (List intended journal.)

☐ POSTER (To be demonstrated at meeting/Name of Meeting, City, State, and Date of Meeting)

☐ PLATFORM PRESENTATION (At civilian institutions/Name of Meeting, State, Date of Meeting)

☐ OTHER (Describe: Name of Meeting, City, State, and Date of Meeting)

6. WHAT IS THE EXPECTED DATE YOUR PRESENTATION/PUBLICATION WILL BE SUBMITTED TO THE DEFENSE TECHNICAL INFORMATION CENTER (DTIC)? 1 June 2016

7. WHO IS THE PRIMARY 59 MDW POINT OF CONTACT? (Last, First, Mi.) (Include email)
Walker, Katherine katherine.walker.ctr@us.af.mil

DUTY PHONE/PAGER No.
292-5931

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I CERTIFY ANY HUMAN OR ANIMAL RESEARCH RELATED STUDIES WERE APPROVED AND PERFORMED IN STRICT ACCORDANCE WITH 32 CFR 219, AFMAN 46-461 IP AND 59 MDW 41-108. I HAVE READ THE FINAL VERSION OF THE ATTACHED MATERIAL AND CERTIFY THAT IT IS AN ACCURATE MANUSCRIPT FOR PUBLICATION AND/OR PRESENTATION.

AUTHOR'S PRINTED NAME/RANK/GRADE
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Date: 2016.01.25 13:48:58 -08'00'

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Date: 2016.01.25 13:48:58 -08'00'

59 MDW Form 3039 20151028
Supersedes 59 MDW Form 3039, 20131018
Page 2 of 3
The authored chapter is approved. Where has this Form 3039 been since 9 Feb 2016?
Pregnancy is a marvelment that researchers struggle to understand. The physiological and psychological changes brought about with pregnancy are so complex that in the 6th edition of the Williams obstetrical textbook (Shears & Williams, 1928) it was stated that “pregnancy begins with a striking and wonderful phenomenon which in the present state of our knowledge is beyond limits of explanation or interpretation (p. 1)” Admittedly, incredible advances have been made in prenatal care, but there seems to be a continual stream of questions, for which we really do not know the answers. Importantly, the existence of the fertilized ovum residing in the mother’s uterus, ignites immense physical changes within the mother. The woman also begins to develop maternal attitudes and behaviors. This transition occurs regardless of whether the mother is a first-time mother or a multigravida (Rubin, 1984).

Not surprisingly, maternal psychological health has received increased attention because of the connection of prenatal anxiety or stress to higher rates of spontaneous abortion (Nakano et al., 2004), preterm birth (Roy-Matton, Moutqui., Brown, Carrier, & Bell, 2011), and low infant birthweight (Rondo et al., 2003). Prenatal depression has been linked to higher incidences of preterm birth (Dayan et al., 2006), decreased maternal attachment and sensitivity (Siddiqui & Hagglof, 2000), and cognitive delays in childhood (Pearson et al., 2013). There is also growing evidence to suggest that maternal prenatal anxiety and depression effect fetal neurodevelopment (King et al., 2010). King et al., found the incidences of hyperemesis gravidarum, gestational diabetes, pre-eclampsia, obstetric cholestasis and placenta previa to be positively correlated with prenatal anxiety and depression scores (King et al., 2010). Additionally, women with
hyperemesis gravidarum were found to have statistically significant higher scores for depression than women not experiencing the pregnancy condition (King et al., 2010). The implications of these associations point to the need for prenatal assessment of anxiety and depression with appropriate intervention. While the idea of providing assessment and intervention seems relatively clear cut, it is difficult to develop interventions and assessment tools that address or measure all the components of prenatal anxiety, stress and depressive symptoms.

Prenatal interventions are commonly focused on promotion of early prenatal care and improving health behaviors (Feinberg, Roettger, Jones, Paul, & Kan, 2015). There is less focus on nonpharmacologic means of decreasing maternal stress and depression. Additionally, cultural practices, pregnancy expectations and the ability to systematically execute an intervention to large samples all impact the quality of the intervention.

**Prenatal intervention for military populations**

Military life, separations and wartime deployments increase psychosocial stress and depression for family members (Lester et al., 2013). For military wives (both active duty and dependent), the psychosocial anxiety and stress of pregnancy may be compounded because of the isolating factors associated with military life and the overextension of the family particularly military spouses to excessive demands that are often accomplished without sufficient resources. This then puts the military wife at an increased risk of pregnancy complications and poor birth and infant outcomes as a result of the pregnancy-associated anxiety, stress and depression. The Joint Chiefs have demanded a comprehensive fitness program that not only takes care of the valuable military members but also their families. This is especially relevant for service member’s expectant wives.
Prior to military deployments the numbers of pregnant active duty members and pregnant wives of active duty military personnel increase (Rosa, 1996). The added element of deployment and separation is anticipated to increase pregnancy-related stress and anxiety experienced by military women. Haas, Pazdernik and Olsen (2005) reported that over half of the highest scores for stress in pregnancy were reported for women experiencing partner deployment. Weis, Lederman, Lilly & Schaffer (2008) found that women with deployed partners during the first trimester of pregnancy, had the greatest anxiety with accepting their pregnancies and identifying with being a mother. Importantly, the higher levels of anxiety persisted long after their partners' return and effected postpartum role satisfaction (Weis & Lederman, 2010). It was also found that contact with one’s partner (during deployment) and in every case, the father of the baby, significantly increased the women’s self-esteem (Weis & Ryan, 2012). Maternal self-esteem is integral to maternal identity formation and maternal-fetal and infant attachment (Alhusen, Hayat & Gross, 2013; Lederman & Weis, 2009). Additionally, in another sample, women indicating higher scores for an esteem-building community of support had lower anxiety but importantly, the women indicating their community as an on-base (military) support element had statistically significant decreases in their prenatal anxiety (Weis, Lederman, Lilly & Schaffer, 2008). Black (1993) recommends that support groups be the foundation of any intervention for military families and that the support be led by military spouses who have successively navigated military deployments and separations. Most military wives indicate that they would not participate in formal services led by professionals. Instead, military wives prefer self-help or support groups with an emphasis on personal growth and family adaptability (Black, 1993). While Black's (1993) recommendations were not made in the context of pregnancy but purely addressing military family separations, these same approaches are particularly beneficial during pregnancy,
especially for young women new to the military lifestyle who may be struggling with incorporating role and identity adjustments secondary to pregnancy and the military. Not surprising, the wives of junior enlisted members tend to struggle the most with separations (Black, 1993; Orthner & Rose, 2005) and most significant, the younger enlisted grades and maternal age are associated with child abuse within the military (Gumbs et al., 2013). These types of statistics further emphasize the importance of prenatal intervention. The desire for military-specific interventions, led by other spouses, designed specifically for military women focused on the psychosocial anxiety and stress of pregnancy with components to build resilience and adaptability formed the foundational constructs of the Mentors Offering Maternal Support (M-O-M-S™) program.

Mentors Offering Maternal Support (M-O-M-S™) Program

The development of the M-O-M-S™ program occurred through a methodical process in which the results from a descriptive study of 421 military wives and mothers (Lederman & Weis, 2009; Weis, Lederman, Lilly & Schaffer, 2008; Weis & Lederman, 2010) were used to build the program elements. Pregnancy-specific prenatal anxiety was linked directly to low birthweight and gestational age at birth for a military population (Lederman & Weis, 2009). The specific elements of pregnancy anxiety were: concerns related to acceptance of pregnancy, identification with the motherhood role, well-being of oneself and that of the unborn child, feelings of helpless and concerns related to preparation for labor. These elements of pregnancy-specific anxiety were incorporated directly into the intervention because they were predictive of low birthweight and early gestational age (Lederman & Weis, 2009). Other elements known to increase maternal prenatal anxiety were added to the intervention program. The relationship of the gravida with her mother and partner/husband is known to impact prenatal maternal anxiety (Lederman & Weis,
and therefore discussion points relative to these topics were added. The availability of the maternal grandmother, reaction to the pregnancy, respect of autonomy, and a willingness to reminisce are all important to the gravida’s relationship with her mother (Lederman & Weis, 2009). For military women, the geographical separations from loved ones may intensify prenatal anxiety, particularly if frequent and sustained contact is difficult. Similarly, the relationship of the gravida with the father of the baby is paramount to her prenatal well-being. Generally, partner support is the greatest contributor to overall maternal well-being during pregnancy (Brown, 1986). It is important that the gravida have availability to her husband or partner and that they can communicate easily about pregnancy and childbirth (Lederman & Weis, 2009). The M-O-M-STM program delves into issues associated with relationship cohesiveness and adaptability and preparation for the inclusion of a new member to the family. In addition to the pregnancy-specific elements of anxiety, knowledge regarding the availability of military and community resources (both military and civilian) is important for family development and cohesiveness. The women are given information regarding important resources for themselves and their growing family.

**M-O-M-STM program design**

The M-O-M-STM program is designed in an eight-session format, with sessions lasting 11/2 hours. Each session mirrors a chapter in the manual created for the M-O-M-STM program. The topics highlighted during each session of the M-O-M-STM are aligned with pregnancy-gestational transitions and prenatal maternal anxiety concerns relevant to that timeframe of pregnancy. The chapters of the manual align with specific elements of prenatal pregnancy-specific anxiety (Lederman & Weis, 2009). Additionally, the manual is designed with fill-in-the blank questions that require some introspection. The questions may require discussions with
one’s mother or husband/partner. While piloting the program, the women in the study identified a
desire to have additional material on multigravida issues and postpartum concerns. These
elements were added to the manual and incorporated into the intervention support program, with
no additional length added to the M-O-M-ST™. Program attendance is designed to start in the first
trimester when prenatal maternal anxiety is high (Lederman & Weis, 2009) and women are
anxious to obtain information (Deutsch, Ruble, Fleming, Brooks-Gunn & Stangor, 1988). With
eight sessions offered every-other-week, the program lasts through the second trimester and into
the beginning of the third trimester when the mother now begins to attend other classes or
programs (birthing classes, breast feeding classes, epidural classes etc.) in preparation for the
birth.

Insert Table 1 here

Program mentors

A foundational element of the M-O-M-ST™ program is the concept of mentors facilitating
the intervention. Mentors are selected based on their experiences as military mothers and wives
and the attitudes they have regarding their experiences, the military life-style and their roles as
military wives and mothers. Importantly, active duty and non-active duty women are encouraged
to be mentors. An optimistic attitude and positive self-esteem are hallmark character traits
desired in the mentors. The mothers within the groups act as mentors as well. It is not
uncommon for multi-gravida women to be part of the M-O-M-ST™, and they provide guidance
and perspective on mothering and growing as a family within the military community. A three-
day training program provides mentor facilitators with the information they need to understand
the underlying theoretical foundations of the program, the concepts they must cover during each
session, and the importance of keeping sessions targeted to the key dimensions for that week. In
addition to each session’s targeted topic, there is the underlying component of family adaptability/flexibility, resilience and coping that is interwoven through all the sessions. The mentor’s experiences, coping strategies and discussions about flexibility within the marriage and family are important elements for every session.

Program effectiveness

Over the course of five years, approximately 300 women from a large military community, with over 230,000 military beneficiaries (MARCOA, 2015) were randomized to either the M-O-M-S™ program in addition to their regular prenatal visits or regular prenatal care without the M-O-M-S™. Women were invited to participate in the study if they were: 1) at least 18 years of age, 2) a pregnant wife of a military service member or an active duty pregnant woman, 3) in the first trimester of pregnancy. Women were excluded from the study if they were going to have a change in duty location during the course of the study, or they were pregnancy daughters of military service members. The objective of the M-O-M-S™ program is to decrease prenatal maternal anxiety and depression, increase coping, resilience, self-esteem and maternal-fetal attachment. Each of these outcome variables were operationalized and measured at three time points (Table 2), once in the first trimester prior to entry into the study, once in the second trimester, at approximately 20 weeks, and again in the 3rd trimester at about 30 weeks gestation.

The women attending the M-O-M-S™ program were given the questionnaire booklets at the time of consent into the study, at class 4 and class 8 (if it corresponded with week 28 or later of gestation). The women in the control group were met at their prenatal appointments (corresponding with the above gestational dates) by a member of the research team and given the booklet of questionnaires.

Insert Table 2 here
Preliminary results

The results provided are for preliminary analysis of 201 participant’s completed questionnaire booklets for all three trimesters. There were statistically significant differences between the treatment (100 women) and control groups (101 women) for maternal age (TX, \(M = 27.5, SD = 4.98\); Control, \(M = 29.6, SD = 5.53, p = 0.01\)), whether they were active duty (AD) (TX, AD = 49; Control, AD = 11, \(p = 0.01\)), and the number of prior deliveries (TX, zero deliveries = 54; Control, zero deliveries = 28, \(p = 0.01\)). Of note, almost half of the pregnancies in each group were unplanned (TX = 44%; Control = 36%) but only two of the pregnancies were unwanted. In comparing differences across pregnancy between the treatment and control groups for each of the outcome measures, statistically significant differences were found for pregnancy-specific anxiety relative to Identification of the Motherhood Role (Control: \(\beta = -0.27, p = 0.13\); M-O-M-S: \(\beta = -0.6, p = 0.02\)) and Preparation for Labor (Control: \(\beta = -0.9, p = 0.02\); M-O-M-S: \(\beta = -2.04, p \leq 0.001\)). Statistically significant decrease in depression across pregnancy was found for the women in the M-O-M-S™ group (Control: \(\beta = 0.36, p = 0.58\); M-O-M-S: \(\beta = -0.94, p = 0.007\)). Of note, the scores for depression in the control group rose during the course of pregnancy. The M-O-M-S™ group also had statistically significant increases in the scores for resilience, while the control groups scores decreased (Control: \(\beta = -0.07, p = 0.68\); M-O-M-S: \(\beta = 0.41, p = 0.05\)).

Not reflected in the statistics for the outcome measures were the mothers’ satisfaction with the program. The majority of the mothers in the program, told their friends about the program. The friends generally wanted to join, but for the purposes of the study, random assignment to the M-O-M-S™ was maintained. The women asked to speak to the investigator so that they could express their feelings regarding the effectiveness of the program, as they felt the measures were
not reflective of the overall benefits. The wives of active duty members indicated feeling profound pressure to support their spouse in his career. This feeling of responsibility was felt to have the highest priority, coming above their own needs and those of their family. They felt their spouses were so involved in work that they were hesitant to ask for any help with matters concerning home or the family. The active duty women indicated fears that their pregnancies would have negative ramifications on their careers. Some of the active duty participants indicated they were trying to keep their pregnancies secret for as long as they could in order to decrease the likelihood of any ramifications. All the women in the M-O-M-S™ program voiced a desire for ongoing programs like the M-O-M-S™ that enable open discussions in a supportive, therapeutic manner. Additionally, the women indicated that the M-O-M-S™ program provided an opportunity to ask all the questions they were unable to ask at their prenatal appointments because of time and availability of the provider or clinic staff. Being able to ask all their questions and receive answers from both the mentors and other mothers was beneficial.

Implications and recommendations

There is a growing body of science related to the psychosocial stress of pregnancy and poor birth and infant outcomes (Charil, Laplante, Vaillancourt, & King, 2010; McDonald, Kingston, Bayrampour, Dolan & Tough, 2014). However, there is a lack of longitudinal studies, testing the effectiveness of prenatal assessment and intervention programs for decreasing psychosocial stress of pregnancy and depression, particularly within a military population. The preliminary findings from this study provide some evidence to support the effectiveness of a prenatal mentored-support program for decreasing the psychosocial stress of pregnancy and depression. The statistically significant decreases for two pregnancy-specific measures of anxiety, Identification of the Motherhood Role and Preparation for Labor, were important, in that
both of these measures were found to predict gestational age at birth (Lederman & Weis, 2009). Anxiety related to Preparation for Labor was also found to predict lower infant birthweight (Lederman & Weis, 2009). Identification with the motherhood role is an intellectual task in which the gravida may or may not want to be like her maternal role models. Lederman & Weis (2009) indicated that this type of prenatal psychosocial stress is best addressed through supportive, informational interventions. The findings from this study support that assertion.

Additionally, military women, have voiced a desire specifically for peer support programs. The decrease in depression scores for the M-O-M-ST™ participants is also a significant result in that decreases in prenatal depression have been linked directly to improved maternal-infant attachment (Dubber, Reck, Muller, & Gawlik, 2015) and child behavioral development (Moehler et al., 2007). Several women in the study had been unsuccessful in combating their depression through psychotherapy and pharmacological measures. They all indicated great satisfaction with the M-O-M-ST™ program and they had significant decreases in their scores over the course of pregnancy and participation in the program. Field, Diego, Delgado & Medina (2013) compared the results of a group interpersonal psychotherapy program and a peer support program and found that both groups had statistically significant decreases in depression, anxiety and cortisol values. There was a greater decrease in the peer support group’s cortisol values. However, none of the scores showed a statistically significant difference between groups. The authors do note that the results provide evidence of the positive nature of the two programs. Field’s et al., (2007) indicated that some of their results were not sustained over pregnancy. The design of this study prevented us from determining whether the decreases in anxiety and depression and increased resilience were sustained. However, the goal of the program was to effect birth outcomes. Given the results from earlier studies, the intervention focused on first and second trimester psychosocial stress and
anxiety. It was anticipated that decreases in psychosocial stress of pregnancy would impact birthweight and infant gestational ages. While these results are preliminary and do not include birth outcomes, the findings are promising in that psychosocial stress known to predict both low birth weight and infant gestational age were decreased.
References


http://snrs.org/publications/SOJNR_articles2/Vol10Num03Main.htm

<table>
<thead>
<tr>
<th>Class</th>
<th>Topic</th>
<th>Content</th>
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| 1 | Acceptance of Pregnancy | - Feelings about pregnancy (put it under introductions)  
- Introduction of mentors and other class participants  
- Pregnancy symptoms  
- Body changes  
- 1st trimester pictures |
| 2 | Identification with Motherhood Role | - Envisioning oneself as a mother (note you had two s in oneself)  
- Motivation for pregnancy  
- Motherhood role (primary or competing) |
| 3 | Relationship with Mother | - Mother-Daughter relationship  
- Reaction to pregnancy  
- Wantedness of child |
| 4 | Relationship with Husband | - Relationship changes due to pregnancy  
- Mutual empathy, understanding, and support  
- Adaptation to the pregnancy  
- Concerns related to family roles |
| 5 | Well Being of Self and Baby | - Concerns for self and baby before, during and after delivery  
- Post-partum concerns - health, boundaries, roles and relationships  
- Childcare options and plans  
- Planning/preparing for baby  
- 2nd trimester pictures |
| 6 | Fear of Helplessness and Loss of Control In Labor | - Deep breathing exercise  
- Psychological resilience and coping with stress before and during labor  
- Labor fears and relinquishing control  
- Pain management during labor  
- Mental health plan |
| 7 | Preparation for Labor | - Birth plan  
- Body changes in preparation for labor  
- Getting ready  
- Self-confidence for labor/delivery process  
- 3rd trimester pictures |
| 8 | Q&A | - Post-partum care  
- Communication with partner & family  
- Military/local city resources for pregnancy/labor classes, safety, and family support assistance  
- Provide participant pictures |
<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
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<tbody>
<tr>
<td><strong>Prenatal maternal stress and anxiety</strong></td>
<td><strong>Lederman Prenatal Self-Evaluation Questionnaire Short Form (PSEQ-SF)</strong>, 53 items (7 scales) Higher scores on a scale indicate greater prenatal psychosocial anxiety. Biochemical markers of stress in labor, and labor and postpartum outcomes were used to provide convergent and divergent construct validity; Cronbach’s alpha coefficients for the original PSEQ long form range from $\alpha = .75$ to .92 (Lederman, 1996; Lederman and Weis, 2009). Weis obtained similar coefficients in her military populations. The instrument was factored with a military population and all 7 scales remained distinct. The 7 scales measure Well-Being of Self and Baby (7 items), Acceptance of Pregnancy (9 items), Identification of the Motherhood Role (9 items), Preparation for Labor (7 items), Fear of Helplessness and Loss of Control (7 items), Relationship with Husband (8 items) and, Relationship with Mother (8 items). Each scale contains both negatively and positively worded items. The scales measure the level of anxiety the woman is experiencing relative to the particular dimension. Alpha coefficients for this study ranged from $\alpha = .75$ to .92.</td>
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<tr>
<td><strong>Maternal-fetal attachment</strong></td>
<td><strong>Maternal Antenatal Attachment Scale (MAAS)</strong> 19-item scale. The internal consistency for the scale is $\alpha = .82$. Higher scores indicate higher maternal-fetal attachment. Factor analysis yielded two distinct dimensions: Quality of Attachment (10 items), and Frequency of Attachment (9 items). The “Quality” dimension assesses affective experiences such as closeness, tenderness, positive feelings about the fetus, a desire to know it, and mental representations of the future baby. The “Frequency” dimension assesses the intensity of preoccupation with the fetus (time devoted to thinking about, talking to, and dreaming of the unborn baby). The scale focuses on thoughts and feelings regarding the baby, rather than the pregnancy or the maternal role, which differentiate it from the Maternal-Fetal Attachment Scale (Cranley, 1981). Alpha coefficients for this study ranged from $\alpha = .77$ to .83</td>
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<tr>
<td><strong>Self-esteem</strong></td>
<td><strong>Rosenberg Self-Esteem Scale (RSE)</strong>, 10-item scale measuring the degree to which one values oneself. The possible range of scores is 10 to 40, with higher scores indicating higher self-acceptance. The Cronbach’s alpha reliabilities range from .84 to .90. The construct validity of the instrument was demonstrated by examining its conformity to theoretical predictions (Rosenberg, 1979). The test-retest reliability was found to be $r = 0.85$. This instrument was used in the pilot MOMS project with good results. Alpha coefficients for this study ranged from $\alpha = .87$ to .90.</td>
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| **Coping (measure of resilience)**           | **COPE, 60-item scale measures 13 conceptually distinct scales related to active coping, the process of taking active steps and planning, thinking how to cope with stress (Carver, Scheier, & Weintraub, 1989).** Test-retest scores over a 6-week interval reflect relatively stable scores ($r = .46-.86; r = .42-.89$). Convergent-discriminant validity was determined with moderate correlations with other concepts relative to coping: optimism, control, self-
esteem, hardiness, anxiety, social blunting and monitoring. The Cronbach’s alpha coefficients for the COPE scales range from $\alpha = .65 - .92$). The authors indicate that all or some of the scales may be used. For the purposes of this study, the directions to the respondent will clearly indicate that the questions pertain to their ability to “cope” with military demands and lifestyle. Alpha coefficients for this study ranged from $\alpha = .86$ to $.87$

| Prenatal depression | The Edinburgh Postnatal Depression Scale (EPDS) is a 10-item self-report scale validated for use during pregnancy and the postpartum period (Murray & Cox, 1990; Thorpe, 1993). Scores range from 0-30; higher scores are associated with higher depression. Similar to the recommendations of Appolonio & Fingerhut (2008), scores of 12 or greater were associated with prenatal depression. The EPDS was the one instrument scored immediately following completion as participants scoring 14 or greater were referred for further evaluation. The Cronbach’s alpha has been established as 0.80. For a military sample of over 400 women prenatally, the Cronbach’s alpha coefficient was $\alpha = 0.86$ (Weis & Lederman, 2010). Alpha coefficients for this study ranged from $\alpha = .86$ to $.87$ |

Disclaimers:

“The views expressed are those of the presenters and do not reflect the official views or policy of the Department of Defense or its Components.”

“The voluntary, fully informed consent of the subjects used in this research was obtained as required by 32 CFR 219 and DoDI 3216.02_AFI 40-402, Protection of Human Subjects in Biomedical and Behavioral Research.”
MEMORANDUM FOR 59 MDW

ATTN: Dr. Karen Weis

FROM: 502 ISG/IA (Lt Heather Slawson)

SUBJECT: Ethics Review for Publication Approval Request

1. BLUF: A request for a legal review of a book chapter titled “Current Military Perinatal Mental Health Treatment Models” was submitted by Dr. Karen Weis. Dr. Weis plans to publish the chapter in a book titled “Perinatal Mental Health and the Military Family: Identifying and Treating Mood and Anxiety Disorders.” The chapter included the required disclaimer. A Public Affairs review will be required if it has not already been obtained. There are no conflict of interest issues with publishing this chapter.

2. FACTS: Dr. Weis plans to publish a chapter titled “Current Military Perinatal Mental Health Treatment Models” in a book titled “Perinatal Mental Health and the Military Family: Identifying and Treating Mood and Anxiety Disorders.”

3. LAWS AND REGULATIONS: DoD 5500.07-R, Joint Ethics Regulation (JER), section 3-305 lays out rules governing “Teaching, Speaking and Writing.” If the presentation will “deal in significant part with any ongoing or announced policy, program or operation” of the Air Force, the presenter is required to include a disclaimer that states the “views presented are those of the speaker or author and do not necessarily represent the views of DoD or its Components.”

4. ANALYSIS: The presentation does not “deal in significant part with any ongoing or announced policy, program or operation” of the Air Force. However, the information to be discussed in the chapter was obtained as part of the authors’ military medical practice. The authors included the required disclaimer that the views presented are those of the authors and do not necessarily represent the views of DoD or its Components. A Public Affairs review will be needed if it has not already been obtained. There are no apparent conflicts of interest that would prohibit the publication of the chapter.

5. CONCLUSIONS: The book chapter submitted for review included the disclaimer required by the JER. There are no conflicts of interest. If you have any questions, please call Lt Slawson at 210-671-5771.

I concur.

HEATHER M. SLAWSON, J. I., USAF
Assistant Staff Judge Advocate

ARLENE R. CHRISTILLES
Chief, Civil Law

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