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Exploring the Mental Health Experience of Perinatal Military Spouses Based in Sigonella, Italy

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**Exploring the Mental Health Experience of Perinatal Military Spouses Based in Sigonella,
Italy**

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Abstract

The perinatal period can have a profound impact on the mental health of women, their infants, and their families, especially when it comes to depression and anxiety disorders. This study aims to delve into the experiences of perinatal mental health among military spouses stationed overseas, on Naval Air Station Sigonella, Italy, and contribute to the limited research on active-duty military spouses and their perinatal mental health while stationed overseas. The research uses a qualitative phenomenological approach, seeking to provide valuable insights into the lived experiences of military spouses and their perinatal mental health. Risk factors associated with perinatal mental illness are reviewed and highlight the specific challenges faced by military families, such as employment restrictions and social support difficulties. Participants were recruited through popular Sigonella Facebook pages using convenience and snowball sampling methods. One-on-one interviews were conducted through Zoom, with a primary focus on participants' perinatal mental health experiences. The data analysis followed an inductive approach, and common themes and patterns were identified through iterative coding of interview transcripts. The study involved five adult female military spouses aged between 26 and 40. Themes identified from interviews included the impact of pregnancy and birth in Sicily on mental health, the need for various forms of support, the quality of care from Military Treatment Facilities (MTF), and challenges associated with medical care outside the base. Participants reported experiencing a range of emotions during pregnancy, including excitement, fear, anxiety, and isolation. The discussion highlights the complexities of mental health care access and the influence of social and familial support systems during the perinatal period.

CHAPTER 1: INTRODUCTION

Mental health conditions are common among the general population. The American National Institute of Health estimates that in 2021, 57.8 million adults were suffering from a mental health condition, representing about 23% of American adults (Department of Health and Human Services, 2023). Of these mental health conditions, depression is one of the most common mental health issues, with an estimated five percent of adults suffering from it globally, making depression the leading cause of disability worldwide (WHO, 2021). Depression and anxiety disorders can have significant effects during the perinatal period, as they can affect not only women but also their infants and families (O'Hara & Wisner, 2014). While perinatal depression (PND) has been widely studied among the general population, there is a small body of literature on how the stressors of a military lifestyle can affect women's mental health during the perinatal phase. Combined with being stationed overseas and geographically separated from family and cultural norms, military life stressors could add additional risk factors for PND (Macek, 2023; Russo & Fallon, 2015). This study aims to explore the personal experiences military spouses have had with their perinatal mental health while stationed overseas in a geographically isolated area.

The objective of this study is to utilize a qualitative phenomenological approach through one-on-one semi-structured interviews with women who have given birth while stationed at Naval Air Station (NAS) Sigonella, Italy. We aim to understand the mental health experiences of pregnant and postpartum military spouses using the military health system overseas. This research will provide a further understanding through a narrative description and identifying recurring themes, the mental health experiences of military spouses who have been pregnant and postpartum overseas. This will contribute to current research, identify further research gaps for

future studies, and inform stakeholders about potential opportunities to improve the care provided to military spouses stationed abroad.

CHAPTER 2: BACKGROUND AND LITERATURE REVIEW

It is typical for women to experience an assortment of physical and emotional symptoms in the days following delivery. Commonly, these symptoms have been characterized as the "baby blues" or "postpartum blues." These symptoms are often attributed to the hormonal readjustment that occurs three to five days after delivery and typically lasts up to two weeks (Najman et al., 2000; NIMH, 2021). However, perinatal mental illness is a complication that can affect women during pregnancy and up to one year postpartum. Perinatal Depression (PND) can vary from mild anxiety and depression to mania and psychosis and should not be confused with baby blues. In the literature related to perinatal mental illness, a variety of terms are used, such as postpartum depression, postnatal depression, peripartum depression, and postpartum anxiety. To encompass all these terms, we will be using the term perinatal depression or PND.

There are a number of risk factors for perinatal mental illness, some of which include lack of partner support or conflict, unwanted pregnancy, history of mental illness with bipolar disorder, depression or anxiety, life stressors, lack of social support, and maternal anxiety (Klaman & Turner, 2016; O'Hara & Wisner, 2014; Spooner, 2012). Over the years, numerous studies have been conducted by government agencies, the Department of Defense, and private organizations, analyzing how military members' mental states are affected by their work, the stressors of constant deployments, both short and long, and other compounding factors of military life (Vergun, 2023). Few studies have analyzed how a military lifestyle impacts active-duty military family members and, more specifically, the role it may play on pregnant and postpartum military spouses (Klaman & Turner, 2016). A military lifestyle is one where active-

duty military members and their families live and work on or near a military base, both locally and overseas. Families are required to move locations frequently and are geographically and socially separated from their extended family.

The United States Government Accountability Office reported in May 2022 that between 2017 and 2019, nearly 36 percent of perinatal military-affiliated beneficiaries received a mental health diagnosis (Government Accountability Office, 2022). The report published by the GAO examined all TRICARE beneficiaries; however, the report did not examine whether recipients were located in CONUS (in the continental United States) or OCONUS (outside the continental United States). This is essential to distinguish because those who are OCONUS are considered a population at greater risk, given that they are faced with added hardship (Cole et al., 2021). Military spouses encounter a host of difficulties when residing overseas, particularly with regard to social support, adjusting to new cultural and linguistic surroundings, and employment or career challenges.

Additionally, many families may find themselves living on the edge of poverty due to restrictions put in place by the SOFAS — a multilateral or bilateral agreement that establishes the framework under which US military personnel operate in a foreign country and how domestic laws of the foreign jurisdiction apply toward US personnel in that country (USAF Legal Academy, n/d). The military newspaper Stars and Stripes (2023) reported on how the SOFA regulations restrict US dependents of active-duty personnel from working outside of the military base and, in some locations, will not allow citizens to work remotely with US-based companies, resulting in thousands of military families stationed overseas struggling to make ends meet, as it poses significant challenges for military spouses to seek employment abroad. The inability of military spouses to work outside the base, unclear guidelines, and prohibitive

regulations have led to many families relying on a single income and even government assistance to meet their basic needs. This situation can result in a cascade of negative consequences, including reduced job satisfaction, decreased earning potential, and a sense of loss of independence, contributing to negative mental health outcomes (Bath, 2023).

The SOPHA agreement in Italy had remained unaltered since 1951 until the announcement on August 30, 2023, that dependents of active military personnel would now have the option to telecommute for U.S.-based companies. This momentous development will allow families to transition more smoothly while relocating abroad, thereby significantly enhancing their overall quality of life. It is important to note that certain aspects remain unclear concerning teleworking for U.S.-based companies from Italy, including tax filing procedures (EURAFCENT, 2023). As such, it is recommended that those considering beginning a new position that involves teleworking seek guidance from the military legal office to ensure they are fully informed about all relevant regulations and requirements.

Klaman and Turner (2016) conducted a systematic literature review of 10 articles that reviewed PND among both US military women and military spouses of service members. They reviewed the prevalence of PND among this population, whether or not deployment contributed as a risk factor for PND and assessed the quality of screening for PND among military women and military spouses to service members. Their findings indicate that the prevalence of PND was between 4.60 and 50.7%. The wide range could be attributed to the varied sample sizes, methodological differences between studies, and various cutoff scores or instrumentation to measure depression (Klaman & Turner, 2016).

Karen Weis, along with colleagues (2017), conducted an evaluation of the Mentors Offering Maternal Support (MOMS) program, an intervention program designed for prenatal

women within the military community. Over a span of five years, the MOMS program, facilitated by group mentors, engaged close to 300 women in eight sessions, focusing on diverse topics, including pregnancy-related emotions, adjustments in relationships, and postpartum concerns. By establishing a supportive peer network for pregnant military spouses, the MOMS program aimed to address various challenges faced during pregnancy and postpartum periods. Their study highlighted a reduction in prenatal depression and cortisol levels among participants of the MOMS program in comparison to those in the control group, emphasizing the program's positive impact on the mental well-being of pregnant military spouses. This underscores the importance of targeted interventions and support networks specifically tailored to the unique needs of military families, particularly during pregnancy and postpartum phases (Weis et al., 2017).

Similarly, Buultjens et al. (2020) conducted a systematic review focusing on the influence of group pregnancy care on the mental health and overall well-being of expectant mothers. Importantly, this review was not conducted strictly within the military population, however, the study revealed that participation in group pregnancy care programs can have a notable positive effect on mental well-being, mitigating psychological stressors such as depression and anxiety, thereby contributing to a healthier pregnancy experience. Despite these promising findings, the study highlighted the necessity for further research to ascertain the effectiveness of this approach across diverse populations and within various clinical settings, underscoring the importance of continued investigation and development in this area (Buultjens, et al., 2020).

Additionally, a mixed methods study was conducted by Fowler et al. (2020) comparing the experiences of TRICARE (military) beneficiaries who received prenatal care through the

CenteringPregnancy model with those who received customary individual prenatal care in the same military treatment facility (MTF). CenteringPregnancy is a group pregnancy care approach developed by midwife Sharon Rising. Centering groups women based on their gestational age for group care offers advantages outside traditional care, including guidance on healthy eating habits, physical activity, personal well-being, natural delivery methods, methods to reduce stress, breastfeeding, and taking care of newborn babies (Fowler et al., 2020). Results indicated that group prenatal care has positively impacted patient experiences in military treatment facilities. However, no significant differences were revealed between those who received individual care and those who were part of the Centering cohort (Fowler et al., 2020). While these studies have provided valuable information regarding prenatal care that addressed mental health, none were found that focus on care for military personnel and their families living overseas.

The research conducted so far on mental health care during pregnancy has been instrumental in providing valuable insights. However, it is worth noting that none of these studies have delved explicitly into the unique requirements of military personnel and their families residing overseas. While perinatal mental health is essential in all locations, this research will focus solely on military spouses overseas, as they are a particularly vulnerable population. The risk factors that contribute to poor mental health are significantly magnified for military personnel stationed abroad. This is primarily due to the fact that they are further isolated from their support systems, and their access to comfort amenities is limited. Relocating to a foreign country can present significant challenges that can lead to heightened levels of stress and anxiety. Separation from established support systems such as friends and family, coupled with the complexities of adapting to a new culture and language and the potential loss of employment

and financial independence, can contribute to a taxing and overwhelming experience (Cole et al., 2021).

CHAPTER 3: METHODS

Participants and Procedures

The research team established a recruitment goal of five to seven participants. Information and recruitment details were announced on two of Sigonella's most popular Facebook pages: Women of Sigonella and Siglist —generally, information on military posts is most often shared through community military Facebook pages. Sampling was conducted via non-probability sampling, specifically convenience and snowball sampling. Through convenience sampling, I received participant information from online recruitment via Facebook, and snowball sampling was utilized as participants had acquaintances or friends who also had a child while stationed in Sicily and were invited to share their personal experiences for the benefit of the study. The recruitment notice was disseminated on Facebook on the 8th of August, 2023, and all the interviews were conducted before the 26th of September of the same year.

Eligibility Criteria

Applicants must be a military spouse to an active-duty service member (including all branches, in possession of a valid DoD ID Card), must have received perinatal health services while stationed in Sicily, assigned on command sponsorship, and through the military health system, or referred off-post by TRICARE, the military insurance program. Participants were required to read and speak English, and an age restriction of 18 years old was implemented. Applicants must have received perinatal health care within the last two years under the conditions mentioned.

Required eligibility was established through an email screening at the beginning of recruitment. Once assessed for eligibility, participants were sent a consent form via email explaining the purpose of the study, which outlined the study's potential risks, the participant's rights, and the steps that would be taken to protect their confidentiality. The consent form required a signature to participate, and participants were encouraged to reach out if they had any questions or concerns about the consent form. Following the participant's consent, the researcher contacted each participant and scheduled a one-on-one online interview. Interviews were conducted via Zoom to allow participants to be in the comfort of their own homes and to allow for transcript recording. Interviews conducted were recorded verbally within the Zoom application. Video was only used and recorded at the request and consent of the participant.

Risk

Participants may run into the risk of mental health distress or uncomfortable feelings by re-telling their perinatal mental health experiences. Participants were provided resources for local and tele-mental health programs at the conclusion of the interview, which are readily available to them as military spouses assigned to an overseas location.

Ethical Considerations & IRB

IRB approval is not required as

a systematic investigation conducted by a student that involves living individuals but is performed solely to meet educational requirements of a single academic course is not considered human subject research providing the results of the investigation are presented only within the confines of the classroom or similar forum and to the students, their instructors, parents/family members, or other invited guests" that IRB Review is not

needed (Master of Public Health Program CPH 529 Capstone Experience - Handbook, 2022).

Study Design

The approach to this study is qualitative, using a phenomenological approach through one-on-one semi-structured interviews. We collected data on the mental health experience of military spouses stationed overseas in Europe during their perinatal health care from military-affiliated providers or, if required, off-base from a host nation provider. Phenomenology is a qualitative research methodology that explores and understands an individual's subjective experiences within their environment and circumstances (Neubauer, et al., 2019). It involves analyzing the various factors that shape an individual's interpretation of their experiences, including their emotions, beliefs, and cultural background. By utilizing this approach, we can gain insight into how individuals interact with their surroundings and the world around them and obtain a deeper understanding of the complexity of their experiences (Neubauer, et al., 2019).

Interviews asked participants to provide demographic information, including their ethnicity, age, highest level of education, military affiliation, and how long they have lived at their current location. The subsequent questions were semi-structured, exploring their perinatal mental health journey both during pregnancy and postpartum. Participants were asked about their experiences with the military hospital system and healthcare providers, as well as whether they had sought out mental health services during their perinatal period. Finally, participants were encouraged to share any support or resources that were particularly helpful to them and to discuss any other topics they wanted to share (see Appendix).

Data Analysis

Interviews were digitally recorded and transcribed through Zoom. The primary researcher listened to the recordings of each interview and checked for accuracy, validated that the transcripts were correct, and made corrections where needed. The data analysis process was conducted using an inductive approach, which involves collecting and analyzing data without predetermined categories or theories. This approach provides flexibility and allows the data to guide the research process (Bradley, et al., 2007). The researcher then printed out the transcripts of each interview and listened to each recording while adding reflexivity notes that were missed in the initial interview. All interviews were listened to again, and new concepts or emerging ideas were noted, such as emotions and encounters. Multiple rounds of careful listening and analysis took place, with the researcher taking diligent notes and ensuring that every aspect of the interviews was considered. Through this process, the researcher was ultimately able to identify a number of common themes and patterns that emerged across the participants' interviews (Ryan & Bernard, 2003).

After making notes on each interview, coding was completed to categorize the data in a codebook, with themes listed in the first column followed by codes in the second column, definitions for each code in the third column, and quotes that correspond under each code in the fourth column. The data in the codebook was then used to create a code structure (Curry, 2015). Using an inductive approach, themes, and codes were not set a priori and instead emerged during the data analysis process.

Researcher & Reflexivity

As the researcher, I am an active-duty military spouse who has been stationed overseas in Germany, Hawaii, and Italy. I have not given birth overseas or been diagnosed with perinatal

mental health difficulties. I have four children, all of whom were born in different states due to military change of stations. As a military family of 19+ years, we have moved, permanent change of station, ten times to date. I hope my military spouse experience will give me some insight into what the enrolled participants have experienced. My employment is as the New Parent Support Home Visitor in Sigonella, Italy, where the study is conducted. As a dedicated advocate for military families, my primary objective is to facilitate healthy and lasting connections between parents and their children amidst the challenges of military life. My program offers a wide range of services designed to assist parents in achieving this goal. These services include home visits, educational resources, and support networks. By leveraging these resources, military parents can navigate the unique demands of their lifestyle while prioritizing their children's emotional and developmental needs. Through this program, I am committed to empowering military families to build strong, resilient, and thriving relationships that endure.

To ensure reflexivity and minimize potential bias, I recorded reflexive notes during the interview process and subsequent reviews of the recorded or transcribed interviews. To further minimize any potential bias, I also employed the technique of peer debriefing, where I sought feedback from a colleague on my reflexive processes and coding strategies. I included rich and thick descriptions, complete with direct quotes from the transcribed interviews, to provide a more nuanced and comprehensive analysis. These methods helped to gain a deeper understanding of the participants under inquiry and ultimately contributed to the research's overall academic reliability and validity. In addition, I conducted frequent assessments to validate and ensure the meaning and accuracy of the assigned codes and their corresponding descriptions to detect any potential deviation.

CHAPTER 4: FINDINGS

The study sample comprised five adult females aged between 26 and 40. Among them, three were primiparous—this being their first-time giving birth, while the remaining two had prior childbirth experience (Lindblad, et al., 2022). The educational status of the participants varied, with one holding a master's degree and three possessing bachelor's degrees; their most recent births were between three months and 11 months prior to the interview. Out of the five women who were interviewed, four of them delivered their babies at the Military Treatment Facility (MTF), whereas the remaining one gave birth at a Sicilian hospital, which is locally referred to as "out in town" (see Table 1).

After conducting a thorough analysis, four themes were identified. These themes include mental health and the impact of pregnancy and birth in Sigonella, the need for support, including the different ways it is needed and received, care provided by the Military Treatment Facilities (MTF), and challenges associated with medical care outside of the base, labeled as healthcare off post.

Mental Health

During the interviews, mental health emerged as a prominent theme, given its interconnections with the semi-structured questions posed to the participants. The personal accounts participants shared in the interviews serve as a reflection of the complex and multifaceted nature of mental health experiences during and after pregnancy. Emotions that were reported by the participants included excitement, fear, anxiety, isolation, and sadness. In connection with mental health, the process of locating mental health care was also discussed.

The study participants showed a level of enthusiasm and excitement as they talked about their pregnancies, expressing excitement to begin the journey of parenthood with anticipation:

I'm like, we were going on so many vacations, I was looking my best like we've always dreamed of this. I've always wanted to be a mom because I worked when we were in America, and I'm like, 'not for me,' just kidding, but like, you know what I mean.

However, despite the excitement, other feelings were discussed. The word fear was coded and defined as distress brought on by impending danger or pain, whether the threat is real or imagined (Dictionary.com, n.d.). Anxiety was coded along with fear, as they both encompass the anticipation of uncertain outcomes. Fear of the unknown for first-time mothers was something that one interviewee struggled with, stating that "I was just constantly, constantly terrified that something was wrong with the baby, especially before I could feel the baby, so like for the first twenty weeks it was so, so bad and I was like having panic attacks." This illuminates how the fear of the unknown can increase the anxiety and fear experienced by expectant mothers, particularly during the initial stages of pregnancy (Harpel, 2008). She also expressed that had she been residing in the United States, she would have had the option to visit an ultrasound clinic to obtain supplementary ultrasounds for reassurance regarding her baby's well-being. Another participant shared about an experience she had when visiting her doctor:

At one of my appointments, they literally had to come in and retake my heart rate and ask me like 'what is wrong with you' and I'm like literally terrified and I just broke down crying, so I was like so terrified all the time. I didn't have any support system, of course, I have my family that lives in America, but I had nobody here, all the friends that I had at the time had no kids and were single, so had just like no idea about anything and... so yeah during pregnancy it was really, really bad.

Another emotion articulated included disconnection or loneliness. A participant who resides approximately an hour away from the military base described her pregnancy and postpartum

journey with a prevailing sense of anxiety, which she attributed to the absence of a reliable support system aside from her spouse, who works long hours and is frequently away on missions. She further noted that the lack of familial support and close friendships exacerbated her feelings of isolation, making it particularly challenging to navigate the difficulties of pregnancy and childbirth in an unfamiliar and unsupportive setting:

When I was pregnant, yeah, definitely I was like pretty anxious, and I have like zero support here, so obviously no family, and I don't have any friends..... So, like I just couldn't really leave the house, if I did it was putting him in the carrier and just like walking for sometimes hours on end because I had nothing else to do.

Additionally, difficulty and frustration with accessing mental health services were expressed by participants. One participant's doctor was concerned about her mental health and referred her for a follow-up with the MTF Psychiatrist. She was asked if she wanted to go on medication, but because she is in the Air Force Reserves as a pilot, she is restricted from going on any medication and stated that she "can't really even have mental health issues. So no, I can't really go and seek help.... so I just have to tough it out." This participant is currently facing a challenging circumstance, acknowledging the potential value of mental health services while encountering obstacles stemming from her status as a pilot within the Reserves. It is important to recognize that pilots are subject to stringent requirements regarding their physical and mental well-being.

Another participant was worried about how her mental health may be affected postpartum because of experiences with her previous birth, so she reached out to the Fleet & Family Support Center, which offers non-medical counseling on base, but they had a two-month waiting list. She then reached out to Military OneSource, which delivers counseling over the phone. However, she

struggled to find a time that would work with her and their availability, stating, "... like I think I've missed two or three appointments now because of the weird time differences. I think it's just harder to get mental health help here." Military OneSource offers confidential counseling options 24 hours a day, seven days a week, 365 days a year. Unfortunately, this participant encountered difficulties with finding a good time to connect with her counselor with the availability that they had offered.

Support

The participants shared experiences reveal significant insights into the perceived levels of assistance, or the lack thereof, regarding mental, physical, and emotional support during various stages of the participants' healthcare journeys. Several narratives highlighted the challenges associated with limited social and family support, resulting in feelings of isolation, helplessness, and emotional distress. The absence of a strong support system is underscored, amplifying the emotional strain experienced by individuals. Support systems come in many forms, for example, family, friends, or community. One participant shared:

My family can't afford to just hop on the airplane and come either. So, nothing I blame my family for, but something that I've accepted that it is just our lifestyle as a military family... As we do a lot without our family.

Another participant who lives off-post shared:

My only human interaction, when I was on maternity leave was like my husband when he came home and like that's not healthy. It's so isolating, even just like walking around town, like if I say hi or something to somebody, they don't even acknowledge me, so I don't think the people are especially nice or warm.

The military lifestyle necessitates a proactive approach to managing connections, owing to the reliance on alternative means of support. Military families are often acutely aware of the importance of maintaining strong relationships with loved ones despite the challenges posed by their unique circumstances.

Additionally, another mother shared that she wasn't getting any sleep because her baby was up every 45 minutes and:

that was hard because obviously, we don't have family who live close by... And I didn't have help, and I was not quite comfortable leaving her with anyone just cause we had just moved here. It wasn't like I could say, "Here, Grandma, like I'm gonna drop her off," you know?

The role played by family members in providing physical and emotional support during the perinatal period cannot be overstated. Family members serve as a critical source of comfort and reassurance to expectant and new mothers by offering practical help with household chores and providing a listening ear to alleviate any anxiety or concerns. While all could not, many participants' families were able to travel to Sicily to assist and stayed for two to seven weeks to lend a hand.

Moreover, cultivating friendships can be invaluable when stationed at a new duty location, as friendships and social connections can profoundly impact individuals' well-being during significant life transitions, particularly pregnancy and childbirth. Participants shared the essential role of supportive friendships in their experiences and the sense of belonging in alleviating feelings of isolation and loneliness. The transformative power of meaningful friendships and community connections fosters a sense of understanding, empathy, and shared experiences among individuals navigating similar life situations. One participant shared:

Once my son was older, I just really had to put myself out there to try and make more friends, and once I did make mom friends, I felt like it's been a 180. I feel like I have an amazing support system. I feel like I've never had better friends than I do now, and it's just like so different now that I have people that really understand what it's like to like be in this stage of life that I'm at.

Military Provided Health Care

The dialogue about health care within the Military Treatment Facility (MTF) in Sicily reflected a range of positive and negative experiences. A general positive experience was conveyed, emphasizing the ease of obtaining appointments and receiving care from providers and nurses. There was a perceived advantage of a smaller MTF compared to larger facilities in the United States. Making appointments was easy, and one participant shared, "As far as like the facility goes, I think it was probably easier to be here because I was one of the only people on the ward both times. It was really, really nice, one-on-one care."

One individual had a particularly stressful experience giving birth at the MTF. She knew from previous births that her labor progressed quickly, having given birth three times before. She informed the labor and delivery unit 30 minutes in advance of their arrival, but upon getting there, the OB was absent, and the nurses were unprepared for delivery. As one of the nurses went to put on gloves to check her dilation, the mother felt the baby was already on its way, stating, "So my husband actually throws a pair of gloves on, and he delivers our baby. The doctor didn't show up for more than 20 minutes after I had already given birth." The mother expressed her gratitude for her previous birthing experiences, which she felt helped facilitate her and her spouse's decision-making process. The obstetrician apologized for his lateness, citing his commute from outside the base as the reason for the delay.

Healthcare Off Post

The theme Healthcare Off Post encompasses the experiences, feelings, and perceptions of healthcare on the Sicilian economy and addresses the discussion about the language barrier that arises in this setting. It is standard practice for all expectant mothers at the 20-week gestational milestone to receive a 3D anatomy scan at an off-base Sicilian medical facility. In numerous instances, a translator during these scans is not guaranteed, exacerbating the challenges of navigating linguistic and sociocultural differences. Several participants in the study highlighted the consequential stress that arose from this process. One participant stated:

I think the fear of having to give birth out in town, having my anatomy scan out in town, by like a different doctor, I didn't love that... Yeah, that's another thing that was added to my mental health issues like I was so terrified that I had to give birth out in town, and I did not want to do that.

Another stated:

I was scared to death that I would have some sort of complication that required a level of care that wasn't available here at the MTF, and I would have been referred to out in town like a NICU situation because I don't have the highest level of confidence in the Italian health system.

A recurring concern and cause of fear and anxiety expressed by all participants was the apprehension about being referred to the Sicilian hospital for delivery, informally termed "out in town." The medical facilities at the Naval Air Station Sigonella lack a Neonatal Intensive Care Unit (NICU). They are unequipped to manage cases involving premature infants or those with complex medical conditions requiring specialized care. Consequently, individuals who experience preterm labor before 37 weeks or are considered to have a high-risk pregnancy are

referred to receive care "out in town." One participant was notified that the Naval Hospital was short-staffed and that she and five other patients would have to complete the rest of their prenatal care "out in town." She was just 20 weeks along:

Once I found out that we're going to town, I did literally everything I could ever try to get myself to not be able to go into town. I literally met with the CEO of the hospital and pled my case and told her that I was scared, I don't want to go. We had a meeting with like his (her spouse's) whole chain of command, and they literally were like too ***** bad. I literally did so much, like I tried so hard for myself.

This fear is often fueled by stories and rumors of women who have had to give birth "out in town." These women have shared their experiences with friends and on social media, which can amplify these fears and contribute to a sense of unease. This participant ended up having a c-section, and her baby was admitted to the NICU for three weeks with a minor lung infection. She shared the perceived inadequacy of the healthcare facilities, with accounts of overcrowded rooms, unsanitary conditions, and a lack of necessary resources. She stated, "I've never seen anyone wear gloves at the hospital; they take your blood just like with their hands like it's insanity."

Furthermore, recounted an incident that took place roughly a week after the birth of her child. Initially, her newborn was being treated in the NICU, where the hospital regulations stipulate that NICU patients are only allowed one visitor per day for a maximum of 30 minutes. While visiting, she began to feel dizzy, lightheaded, and feverish. Upon returning home, she and her husband noticed a concerning yellow discharge from her cesarean section incision. After seeking medical advice from their Italian physician, who assured them it was normal, her symptoms persisted. She then reached out to a close acquaintance, an obstetrics nurse, and was

advised to seek immediate medical attention. Upon examination at the emergency room, she was diagnosed with an enterococcus faecalis infection. To prevent the onset of sepsis, her surgical staples were quickly removed, and sent to surgery where the affected area was thoroughly cleansed. She then was instructed to visit the MTF every day for ten weeks to have her wound cleaned, as they left the wound open during the healing process and check on her status.

Although her recovery was difficult, she eventually made a full recovery. She shared:

I feel overall like I never had, like, really, really bad thoughts. I just thought I have to make it, like it's not like I'm gonna die, like they're not gonna let me die. I just would think everything is okay, they're not gonna let me die. I was in so much pain, every day after I gave birth. So, I feel like now I'm on medication because I can't handle life, so it's a lot... I could never have another baby if I didn't go to therapy.

Following the negative experiences of this patient at the Sicilian hospital, the MTF leadership decided to bring back all other patients who had been referred out due to short staffing to the MTF for the remainder of their perinatal care.

As a service member or family member, getting medical attention in a foreign location can be stressful. The language barrier can be frustrating and intimidating, especially when dealing with important health matters. The military insurance provider, TRICARE, provides translators for such situations, however, these services are typically only available on weekdays, specifically from Monday to Friday, between 8:00 AM to 5:00 PM, and via telephone. As shared by one participant:

You have to call and then wait like 30 minutes on hold to get someone, and then they are talking to them on the phone, and then you are talking, and then like you can't just ask if

the nurse comes in; you can't be like, oh can I ask you a question? Like you know, you have to call.

Another participant shared that while she was receiving postpartum pelvic floor physical therapy off post that, "somebody from TRICARE, a translator, had to come, and then they couldn't come anymore... so it was just like me, like trying my best to understand what she was trying to tell me, it was a pretty terrible experience," The perceived limited access to proficient translation services, coupled with the frustration of navigating phone-based translations, seems to exacerbate the communication gap between patients and healthcare providers. These language barriers can lead to misunderstandings, misdiagnosis, or incorrect treatment. As a result, patients become more vulnerable to medical errors, while healthcare providers struggle to provide the best care possible.

CHAPTER 5: DISCUSSION

In this study, we aimed to understand the mental health experiences of pregnant and postpartum military spouses using the military health system overseas in Sigonella, Sicily. A group of five women aged 26 to 40 shared their personal experiences of pregnancy and childbirth while living overseas on military orders. The research uncovered several significant themes, with mental health, access to healthcare, and support emerging as major topics. The participants conveyed a range of emotions, including excitement, fear, anxiety, isolation, and sadness. The study also shed light on the intricacies and complexities of accessing healthcare in an overseas location. Despite being away from home, the women demonstrated resilience and resourcefulness in seeking care and support during these life-changing experiences. Peer support was identified as a valuable means of alleviating low mood and anxiety while also fostering self-esteem and self-efficacy. It was found that social support can positively impact the overall

mental health of perinatal military spouses overseas. Research has demonstrated that peer support can effectively alleviate low mood and anxiety by tackling emotions of isolation, disempowerment, and stress while simultaneously fostering self-esteem, self-efficacy, and parenting skills. Feelings of disconnection or loneliness were identified as the defining features of isolation (Friedman, et al., 2020; McLeish & Redshaw, 2017). Additionally, the study shed light on the complex challenges faced by participants in overseas contexts. Noteworthy factors that affect their well-being include the interplay between individual coping strategies, resource availability, and healthcare options.

The United States Navy, Army, Air Force, and Marines have introduced a new parental leave benefit program, extending support to birth parents, non-birth parents, and service members who adopt or become foster parents. Eligible personnel can now have up to 12 weeks of free leave within one year to bond with their children and adjust to their new family dynamic (NAVY, 2022). The new program highlights the military's recognition of the multifaceted needs of military families and their commitment to supporting their personnel. By acknowledging the importance of parental leave, the government is taking significant steps toward ensuring its personnel can effectively balance their work and family responsibilities. It is important for service members to be aware of and take advantage of this new benefit program, as it has the potential to impact their lives and the lives of their families meaningfully. It's worth noting that of the five participants who were interviewed, one participant's spouse chose not to utilize their paternity leave, which may have also contributed to the participant's mental health struggles and feelings of isolation. Participants whose partners took advantage of this benefit expressed gratitude and appreciation for the assistance and supportive presence provided. When service members utilize their paternity leave benefit, it plays a fundamental role in offering essential

support to new mothers during a period of transition and recovery. This demonstrates the significance of paternity leave and emphasizes its positive impact on fostering a supportive environment for families during this time. It is an important step in easing the sense of isolation that new mothers may feel, particularly when stationed abroad.

As highlighted in the findings section, a participant disclosed that her status as a pilot in the reserves hindered her from accessing mental health services. Recent research has uncovered that U.S. Military pilots may exhibit healthcare avoidance behavior due to apprehensions about their flying status (Hoffman, et al., 2023). This conversation underscores the significance of exploring alternative pathways for mental health assistance that guarantee privacy and independence, especially within the parameters of military rules and organizations.

Limitations

The study presents certain limitations, primarily attributed to the relatively small sample size used for the analysis that did not reach the point of saturation. A larger cohort would have yielded a broader insight into the general perinatal experience of military spouses stationed in Sigonella, Sicily. Furthermore, expanding the sample size could have enhanced the study's validity and improved the generalizability of the findings to the broader population. It is recommended that future researchers consider expanding the sample size to obtain a more comprehensive understanding of the phenomenon.

Furthermore, the study's focus solely on Sigonella, Sicily, may limit the generalizability of its findings to other military environments or geographic locations, thus affecting the overall external validity of the study. Women's perinatal experiences in various military overseas locations, such as Germany, Japan, or South Korea, might be influenced by a range of unique challenges and obstacles, such as differences in cultural practices and norms, variations in

healthcare systems and resources, and potential language barriers. To effectively address these contextual differences, tailored approaches to perinatal care and support must be implemented, catering to the diverse needs of women and infants in these settings. To overcome these limitations, the study could benefit from a more diverse and representative sample, as well as the inclusion of multiple research sites. It is recommended that this approach be explored as it has the potential to significantly enhance the study's comprehensiveness and strengthen the robustness of its conclusions. Moreover, it is worth noting that conducting a mixed methods design to include quantitative research could potentially yield more profound insights.

Strengths

A time limit was imposed as part of the participant eligibility criteria to mitigate recall bias caused by the gap between the event and the interview, ensuring that participants could recollect their experiences more accurately, including their emotions, challenges, procedures, and personal sentiments at the time. For this study, the time limit was set for women who had given birth in the past two years, though all participants had given birth within the last eleven months.

By utilizing qualitative research, the researcher has been able to uncover and explore complex phenomena that cannot be easily quantified. By capturing the themes of individual experiences, this approach has allowed for insightful glimpses into the lived experiences of individuals, thereby providing a more comprehensive understanding of their experiences and bridging the gap between numerical data and the subjective experiences of individuals.

Conclusion

This research will allow providers to be more acutely aware of the substantial behavioral health issues among their patient population and help to arm them with insight to

provide the needed care in a meaningful way. Considering these findings, military healthcare providers must prioritize the provision of comprehensive mental health support services, improve accessibility to resources, and address the unique challenges faced by military spouses during the perinatal period.

Research indicates that group prenatal care has enhanced patient experience positively. It is recommended that the Sigonella MTF explore offering group care as an alternative for those who express interest. This would allow expecting mothers to receive peer support and potentially foster meaningful friendships during their pregnancy journey, providing additional support.

It is recommended that an assessment be conducted on the services offered by the hospital outside the military base to ensure that they meet the same basic care standards as those in the United States. Such a review would offer a comprehensive perspective on the quality of care provided in the off-post hospital, potentially leading to enhancements in care delivery.

As an educator for new parents at NAS Sigonella, this study has ignited insightful discussions among the programs, such as the Family Advocacy Program (FAP), the mental health collaborative, and the Family Advocacy Council (FAC). These groups are currently exploring innovative approaches to ensure that individuals stationed here receive optimal support, especially those who may feel isolated. We are committed to proactively addressing these challenges and delivering solutions to our community members' unique needs.

Implementing tailored programs that focus on enhancing social support networks and addressing the specific needs of individuals stationed overseas can significantly contribute to military families' overall well-being and resilience. Overall, this serves as a crucial step towards raising awareness and understanding the complex interplay of mental health, social support, and healthcare access within the context of the perinatal experiences of military spouses stationed

overseas. By acknowledging and addressing these challenges, policymakers, healthcare providers, and support services can work collaboratively to enhance the well-being and resilience of military families, thereby promoting a supportive and nurturing environment for both parents and their children within the military community.

APPLICATION OF PUBLIC HEALTH COMPETENCIES

***MPHF2** Select quantitative and qualitative data collection methods appropriate for a given public health context.*

This research will be conducted as a qualitative study to enable an enhanced understanding of military spouses' personal experiences regarding their perinatal mental health while stationed overseas at Naval Air Station Sigonella, Italy. A qualitative method was chosen for this study because it is the most suitable method for collecting the desired form of data.

***MPHF2** Interpret results of data analysis for public health research, policy, or practice.*

Data analysis will be conducted on the information gathered in the qualitative interviews with an inductive approach and coding through thematic findings.

***MCHMPH2** Apply the life course perspective in addressing health, diseases and behaviors of MCH populations.*

Various life course factors can influence mental health and whether care is pursued. For example, linked lives play a significant role in the perinatal mental health of women living overseas on military orders. The guidance and opinions of family members, spouses, and care providers, especially when geographically separated, play an influential role in a person's life. Additionally, human agency, the principle of timing, and historical time and place contribute to the influence of perinatal women living overseas.

***MCHMPH4** Examine how the major determinants of health and disease affect the MCH populations at the local, state, national and global levels.*

This study will review how the major determinants of health play a role in the perinatal mental health of US women living overseas as military spouses and the perceived ease of access

to mental health resources. Additionally, the research will consider how major determinants of health may impact perinatal mental health in a universal healthcare environment overseas.

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Appendix

Interview Guide

Research question: What are the lived experiences and perceived mental health and well-being challenges among perinatal military spouses stationed in Sigonella, Italy?

Thank the participant,

Introduce myself: I am a military spouse living overseas as well, and I have had four children in the military healthcare system, all in different states. I am wrapping up my Master's Degree in Public Health, with a concentration in Maternal & Child Health. I hope to use my education to better the experiences of women and children within the military community.

The study aims to gain a broader picture of the general experience of women who have given birth while stationed overseas in Sigonella. The interview will be recorded, and I will analyze all of the data from the shared experiences among all the interviews. This is a safe and non-judgmental space; please feel safe to share your experiences, thoughts, and feelings openly throughout the process.

Do you have any questions before we begin?

1. Please describe your experience during pregnancy and post-partum with the Military Hospital System and providers.
2. Now that we've talked about your experience with the MTF, can you describe your mental health during pregnancy and after giving birth?
3. Did you seek out mental health support during pregnancy or postpartum? If so, please describe that experience or process.
 - a. Can you describe any support or resources that were particularly helpful to you?
4. Is there anything we didn't discuss that you would like to share about your perinatal mental health journey?

Demographic Information:

1. Age:
2. Ethnicity/Race:
3. Highest Level of Education:
4. Occupation:
5. Number of children:
6. Primary language:
7. How long have you been stationed in Sigonella:
8. Length of time you or your spouse have been active-duty military:

Table 1
Participant Demographics

Characteristic	n
Age	
18-25	0
26-33	4
34-41	1
Education	
High School	0
Some College	1
Bachelors	3
Graduate	1
# of Children	
1	3
2	1
3	0
4	0
5	1
Occupation	
Employed	1
Unemployed	4
Primary Language	
English	5
Other	0
Years in Sigonella	
<1	1
2	3
3	1
Birth Location	
MTF	4
Referred Out	1

Note. n=5.