

DNP Project Proposal

Caring for Women Veterans:

*Improving Outcomes Through Use of Trauma
Informed Care Principles*

Oregon Health & Science University

Sierra L Stuart, FNP-C

Jonas Veteran Healthcare Scholar

Abstract

The VA Portland Health Care System serves more than 95,000 veterans every year across SW Washington and throughout Oregon (U.S. Department of Veteran's Affairs, 2018). Of those, estimates suggest that as many as 45% of the female veteran population have been victims of military sexual trauma (Klingensmith, Tsai, Mota, Southwick, & Pietrzak, 2014). It has been well-established that trauma has profound lasting effects on morbidity and mortality for these women (Calhoun et al., 2018; Creech, & Borsari, 2014; Forman-Hoffman, Mengeling, Booth, Torner, & Sadler, 2012; Freysteinson et al., 2018; Goldberg et al., 2019; Holliday, & Monteith, 2019; Kimerling et al., 2016; Kintzle et al., 2015; Monteith, Smith, Holliday, & Pietrzak, 2018; U.S. Veterans Affairs, 2018). Implementation and use of trauma informed care principles allows for an integration of care techniques that address individual trauma, and through doing so, ensures that services are accessible and patient-centered, encouraging patient engagement and adherence (Raja, Hasnain, Hoersch, Gove-Yin, & Rajagopalan, 2015).

This quality improvement project aimed to provide a formalized trauma informed care principles and resiliency training to the staff of the Portland VA Women's Health Clinic. The training materials were provided through partnership with Trauma Informed Oregon in the form of a 90-minute virtual training created by a certified Trauma Informed Care trainer. Training included an exploration of Trauma Informed Care principles, implementation of Trauma Informed Practices, and provider resiliency. Development of the training was overseen by the Women's Health Program Director and Clinical Psychologist. A five-point post-training Likert Scale survey built using SurveyMonkey will be conducted to collect subjective data regarding the efficacy and meaningfulness of the training. Survey items will be aimed at assessing baseline

experience with trauma informed care materials and perceived usefulness of the training in relation to provider confidence, competence and patient outcomes.

The onset of the global pandemic caused by the SARS-Cov2 betacoronavirus (COVID 19) impacted both the delivery method and timing of this project. Fortunately, a virtual option was available. However, this restricted the opportunity for trainer-trainee engagement, collaboration and real-time question and answer periods. The transition to a virtual format also limited participation as the training was released via e-mail as an optional opportunity, opposed to being conducted in-person during a previously established staff meeting time. This transition paired with the later release date limited the amount of time that the training and survey could be completed.

The impacts of COVID-19 significantly impacted the ability to ensure completion of the training by the WHC staff, which resulted in no WHC data collection from the survey. Moving forward there are many avenues for further investigation and project improvement. This training could be re-sent to the staff of the WHC with a greater allotment of time to complete both the training and the survey; the training could be offered to a different clinical setting, paired with the survey, in an attempt to gather a more diverse participant population; the training could be offered in-person, allowing for further assessment of virtual vs. in-person training efficacy and participation. Regardless of the path, this area of study does warrant much more investigation by future doctoral candidates.

Introduction

By 2020 it is estimated that over 10% of the United States veteran population will be female, which equates to nearly 2 million prospective patients of the Veteran's Health Administration (Lutwak, 2014; Freysteinson et al., 2018). While estimates vary, studies agree

that between 35%-45% of these female veterans will have been victims of military sexual trauma (MST) at some point during their military career (Barth et al., 2016; Freysteinson et al., 2018; Klingensmith et al., 2014). Military members are at high risk for an array of trauma exposures, including physical trauma, psychological trauma, violence/combat exposure, and military sexual trauma, amongst others. Military sexual trauma is defined to include any degree of sexual harassment or sexual assault that occurs during military service (Barth et al., 2016). Current provider and patient perceptions surrounding MST related care and practices agree that improvement in these areas is imperative to improving MST reporting, provider-patient communication, patient adherence, and overall health outcomes for these women (Bergman, Hamilton, Chrystal, Bean-Mayberry, & Yano, 2019; Brignone et al., 2017; Burns, Grindlay, Holt, Manski, & Grossman, 2014; Calhoun et al., 2018; Green et al., 2015; Kimerling, Makin-Byrd, Louzon, Ignacio, & McCarthy, 2016; Landes, Garovoy, & Burkman, 2013; Pandey, Ashfaq, Dauterive, MacCarthy, & Copeland, 2018; Valdez, Kimerling, Hyun, Mark, Saweikis, & Pavao, 2011). This project aims to bring formalized trauma informed care and trauma specific practice training to the Portland Veteran's Health Administration Women's Health Clinic in an effort to bridge the gaps in education and competence that have been identified.

Overall rates of MST within the United States Armed forces is estimated to be around 7.6% and disproportionally affects women (~40% women vs ~1-2% men) and younger members between 18-29 years old (Klingensmith et al., 2014). Additional risk factors related to MST include enlisted rank, service in the Marines or Navy, combat exposure, negative home/personal life and history of sexual trauma (Barth et al., 2016; Suris, & Lind, 2008). It has been well-documented that victims of MST experience a much higher burden of medical co-morbidities including PTSD, depression, anxiety, chronic pain, obesity, eating disorders, and decreased

physical functioning, as well as homelessness, substance use disorders and suicide ideation and suicide related mortality (Calhoun et al., 2018; Creech, & Borsari, 2014; Forman-Hoffman, Mengeling, Booth, Torner, & Sadler, 2012; Frey Steinson et al., 2018; Goldberg et al., 2019; Holliday, & Monteith, 2019; Kimerling et al., 2016; Kintzle et al., 2015; Monteith, Smith, Holliday, & Pietrzak, 2018; U.S. Veterans Affairs, 2018). As the female veteran population is growing, and as we continue to see increased incidence of veteran homelessness, substance use disorders and suicide, it is imperative that we make efforts to identify those at highest risk and intervene appropriately as these patients will continue to fall victim to a failing system if we do not.

Literature Review

Search Strategy

A literature review was performed during the month of August 2019, utilizing PUBMED Medline, Ovid and CINAHL search was conducted using the key terms “military sexual trauma”, "trauma informed care", "female veterans", “primary care”, “trauma screening”, and “female veteran health”. The search was limited to articles published within the last years 10 years in English language with full text availability; this search yielded a result of 47 articles; articles specific to pediatrics, articles that did not discuss care strategies and articles that were specific to a vulnerable populations outside of the female veteran population were excluded. After exclusions a total of 28 peer-reviewed articles were included in this review. This literature review is aimed at assessing the incidence and prevalence of military sexual trauma, barriers to reporting MST and receiving MST specific care, and to identify care strategies that would improve outcomes for female veteran victims of MST. Common themes identified throughout the literature review are as follows: military sexual trauma epidemiology and implications,

current perceptions and practices regarding MST/trauma victims within the VA, and implementation of trauma informed care and trauma specific practices, as well as gaps in literature and ethical issues.

Military sexual trauma reporting epidemiology and implications

As discussed above, MST is a pervasive issue affecting thousands of our military members. While recent efforts have been somewhat successful in bolstering resources for victims of MST, it is estimated that greater than 80% of MST incidents continue to go unreported (Conrad, Young, Hogan, & Armstrong, 2014). Continued research around why reporting levels are so low is warranted however two theories explaining this were identified during this review. Holliday, et. al., posited that one plausible reason that so many female MST victims forgo reporting or delay care, may be related to their sense of institutional betrayal (2019). Military culture is built around an ideal that all members will be cared for and treated with respect, however, for many women this ideal proves false. Therefore, it is not unreasonable for MST victims to expect continued failure in caring for them from another military organization, such as the Veterans Health Administration.

Additionally, women who have reported MST have also detailed ways in which they felt their military organization fell short in addressing the incident, including lack of consequences for the perpetrator and negative reactions to the victim reporting (Burns et al., 2014; Mattocks et al., 2012). The negative stigma surrounding reporting and the lack of appropriate support for victims is leaving countless female veterans from seeking the care that they need. Without proper support and medical intervention, their risk of exposure to preventable and treatable morbidities, as well as risk of developing substance use disorders and attempting/completing suicide will persist, and in many cases, increase (Calhoun et al., 2018; Creech, & Borsari, 2014; Forman-

Hoffman, Mengeling, Booth, Torner, & Sadler, 2012; Freysteinson et al., 2018; Goldberg et al., 2019; Kimerling et al., 2016; Kintzle et al., 2015; Klingensmith et al., 2014; Landes et al., 2013; Valdez et al., 2011).

Further implications noted during this review included the impact of MST on sexual behavior. Studies have demonstrated that a history of MST is correlated with an increase in unintended pregnancy, rates of STIs, incidents of risky sexual behavior, and in subsequent sexual re-traumatization (Freysteinson et al., 2018; Goyal, Mattocks, & Sadler, 2012; Goyal et al., 2014). Additional preliminary studies have also found a likely correlation between MST and decreased sexual pleasure and issues in establishing intimacy, similar to those seen in women who are victims of childhood sexual trauma (Pulverman, & Creech, 2019). Early identification of MST victims and provision of trauma specific support, including mental health care, may be the most efficacious way to mitigate the long term consequences of MST and support our female veterans (Kimerling et al., 2011; Landes et al., 2013; Pandey et al., 2018; Valdez et al., 2011).

Current perceptions and practices regarding MST/trauma victims within the VA

Interestingly, while over 70% of women rated care received from the VHA as “Very Good”, or “Excellent”, they also reported an overall sense of dissatisfaction when it came to care and support related to trauma experiences, specifically MST (Kimerling et al., 2011). This lack of attention to trauma histories left many women feeling unwelcome in many VA clinics, and many women expressed a sense of feeling that they were not receiving the same level of care and attention as their male counterparts (Kehles-Forbes et al., 2017). Identified areas of improvement of care from the patient perspective included increasing provider education and awareness of MST, enhancing and expanding provider-patient communication, and improving provider-provider communication. Of note, nearly 50% of women who are victims of MST seek non-VA

related healthcare and thus have been excluded from the above surveys, implying even greater level of dissatisfaction among female veterans perceptions of the VHA to provide adequate care in relation to their trauma (Mattocks et al., 2012).

While the female veteran population is on the rise, they only comprise 10% of the total veteran population, limiting general primary care provider exposure to female veterans leaving many providers feeling ill-equipped to address female veteran specific needs or traumas, including MST (Lutwak 2014; Green et al., 2015). Studies evaluating provider perceptions elucidated the following barriers to providing trauma specific care: lack of training, lack of time with patient, lack of patient disclosure of trauma, ineffective trauma history screening, and lack of perceived self-proficiency and personal comfort (Bergman et al., 2019; Freysteinson et al., 2018; Green et al., 2015).

Implementation of trauma informed care principles

Implementation strategies of a trauma-informed care perspective in primary care were reviewed in two articles. Authors Machtinger, et.al. found that the elements that must be considered when implementing TIC include that organizational environment, screening protocols and tools, provider response to patient trauma disclosure and foundational values (2015). The foundation of a clinic that embraces TIC is one that holds trauma-informed values, that mandates interprofessional relationships and collaboration, considers implications of care on patients and the clinical team, and that embraces continued monitoring and evaluation. An imperative element of creating a TIC clinic was evaluating the environment to ensure that it was safe, empowering and calm. A qualitative study evaluating women veteran's perspective on the safety and efficacy of the VHA in meeting their mental health needs and considering their trauma revealing that most women believe that the VHA is falling short and that many clinics foster an

unwelcome and unsafe environment for them. The next element of consideration is screening: clinics should ensure thorough screening for trauma, past and present, as well as screening for other mental health symptoms and disorders. However, there is a dramatic lack in policy around trauma screening, allowing trauma survivors to continue to go on unidentified. Finally, response to TIC should also be considered and all services offered should be inclusive and promote safety and healing.

Both authors agreed that formalized trauma-informed care training is both efficacious and cost effective (Machtinger et al., 2015; Kehle-Forbes, et al, 2017). Initial evaluation of the success around formalized training revealed that post-training, providers showed an increase in patient centeredness, as measured by third party observers. Additionally, surveys revealed that providers felt more confident and competent in addressing trauma and patients felt that providers were more open to discussing their trauma; overall patient outcomes improved (Green et al., 2015). It was also agreed that in order for TIC to be as effective as possible there needed to be a genuine commitment from providers and leadership, as well as full leadership endorsement and support of the process. A half-day training was deemed adequate and was favorably reviewed by the providers who participated in the Green, et al. study (2015). Further research needs to be completed around implementation success and identification of barriers in order to identify appropriate and effective implementation strategies.

Ethical Considerations

An additional area of future research that has large ethical implication is in trying to identify why MST continues to persist and to strategize more effective preventative measures (Monteith et al., 2018). Some factors that have been recognized as why MST continues to be such a pervasive issue are as follows: complacent military culture, deployment dynamics, lack

of consequences for perpetrators, fear of stigma or negative reactions to reporting, and availability and awareness of MST support for active duty personnel (Burn et al., 2014). Identification and intervention are paramount in supporting our patients who are victims of MST, but prevention is the ideal intervention and should be prioritized by military organizations.

Further areas of ethical considerations spanned from the individual to societal impact. There was some discussion of patient preference around trauma screening and traumatic event disclosure. It was suggested that cross-sectional patient surveys be conducted to assess these preferences, and to identify which type of providers patients would feel comfortable disclosing trauma events to (general practitioner vs specialist) and how to disclose them (self-reported, through interview or through patient questionnaires) (Raja et al., 2015). While TIC training holds potential to benefit providers across disciplines, patient preference and comfort must be held in high consideration. Additionally, individual considerations must be made in deciding how to frame TIC. The heart of TIC is to remain patient-centered and so in adhering to TIC practices, providers will be taking cultural, ethnic, SES, gender identity, sexual orientation, and other differences into account when providing care.

A final ethical consideration discussed focused on how disclosure of traumatic events will affect the providers serving trauma survivors (Sikka, Morath, & Leape, 2015). While additional research is suggested in this area, protective measures that are already encouraged and practiced by many providers such as self-care and maintenance of work-life balance are suspected to be helpful in reducing negative impact that vicarious traumatization may on involved providers. Furthermore, encouraging provider mindfulness and awareness of their own trauma histories and reactions will help to create an environment of safety and resilience for the clinical team.

Societal impact potential includes decreased rates of homelessness, suicide and substance use disorders. Reducing these adverse outcomes would reduce healthcare and economic costs associated with caring for these individuals. Furthermore, reducing the rates of these adverse outcome in veterans has the potential to set the framework for improving outcomes of the general population. While trauma-informed care will be specifically helpful to the female veterans who have experienced MST, the underlying principles serve people from all trauma backgrounds. Improving community health through addressing individual needs allows for sustainable and meaningful change.

Methods

Framework

Using the Knowledge-to-Action framework as a guide, my project aimed to implement a formalized Trauma-Informed Care and Trauma Specific Practices training into the Portland VA Women's Health clinic. This process had intended to involve steps that allow for continued evaluation of current knowledge and evidence, and modification to implementation strategies, optimizing project outcomes, however these efforts were somewhat limited by COVID-19. The KTA framework still tied in strongly with this project as it is a cyclical process that holds a large-scale view of change in a pre-assessment > intervention > post-assessment format. The specific phases from the KTA frameworks include:

- 1) Phase 2 – adapting the knowledge and background to the VA WHC specifically. The training was tailored to include women's health specific experiences and data. Of note, the principles discussed can be implemented in any setting.
- 2) Phase 7 - sustaining intervention/knowledge use through partnering with WHC staff. Through the partnership built with Clinic Manager Brenda LaFavor, this training has

potential to reach additional audiences, and to be used for new staff coming into the Women's Health Clinic. Permissions were granted to Brenda LaFavor to distribute this training per her discretion.

Setting

The project was based in the Portland VHA Women's Health Clinic. This clinic offers primary care, gynecologic care, and mental health services for female veterans of all ages. The clinic is staffed with providers, mental health support including an on-site psychiatrist, an on-site pharmacist, and a women's health navigator. Project buy-in was established with the WHC Women's Health Medical Director, the Women's Mental Health Program Director and Clinical Psychologist, and the Primary Care NPs. Their ready partnership and personal efforts in trying to create a more trauma supportive environment suggested a strong readiness to implement further change and allowed for successful COVID-19 specific modifications. Through these partnerships this project was tailored to specifically serve the Portland VHA WHC patients, improving likelihood of early adoption of trauma-informed care and trauma specific practices. Few barriers to efficacy and larger-scale adoption of the project were identified to date but do include transition to webinar format, limited number of training participants and the specificity of the clinical setting, which limits external validity. While this clinic fosters a continued desire to improve clinical processes, especially specific to MST, not all clinics will be as aware of the need and potential positive impacts associated with improving MST patient processes.

Population

The target population initially included the WHC staff as was extended to include SON DNP students as well. All staff members were included, and no exclusion criteria were set; as noted

above, permissions were granted to Clinic Manager to share the training with additional managers/staff as she felt appropriate, as well.

Intervention/Implementation

The training was formatted as a Webinar, as was constructed collaboratively between this researcher and the certified Trauma Informed Care Trainer Molly Oberweiser-Kennedy. The Webinar is approximately 90 minutes and includes discussion of Trauma Informed Care practices, resiliency and a personal account from a woman who has faced much medically related trauma specific to women's health. Th

Molly Oberweiser-Kennedy became a certified Trauma Informed Care Trainer through work with Trauma Informed Oregon (TIO). Trauma Informed Oregon was established in 2014 with the purpose of providing a centralized location for providers, healthcare organizations and other agencies to access resources and information related to trauma informed care. Their trainers are trained and equipped with resources to provide training in various settings. The completion of this training will leave staff with a thorough foundational insight into how to provide trauma informed care and the impacts that trauma has on patients. Learning objectives include, but are not limited to the following:

- 1) Participants will understand the principles behind trauma informed care and its relevance within healthcare settings and personal practices.
- 2) Participants will be familiar with the Six Principles of Trauma Informed Care.
- 3) Participants will be able to explain how trauma informed care will positively impact their practice and their patients.
- 4) Participants will be able to provide examples of trauma specific practices (Trauma Informed Oregon, 2016).

This training intervention was sent via e-mail to all intended participants, which also included a link to a Likert Scale survey (see appendix A), constructed via Survey Monkey. This survey aimed to measure perceived efficacy and usefulness of the training. Instructions requested that the virtual training be viewed, and the survey completed, within 8 days of receipt. This timeline allowed for appropriate data collection, synthesis and analysis. Of note, it was encouraged that all potential participants engage with training, even if outside this timeline; training was made available with no end-date. Furthermore, the Women's Health Center Clinic Manager asked for permission to release the training to additional entities, per her discretion; permission was given by this research and the Trauma Informed Oregon Certified Trainer, Molly Oberwieser-Kennedy.

Analysis

This survey included an area for the collection of qualitative data specific to participant role within healthcare and time spent employed in healthcare field. These assessments also allowed for collection of qualitative data around the strengths and weaknesses of the training itself. The post-assessment survey allowed for data analysis through SPSS. The quantitative Likert Scale data was analyzed using paired t-test to assess for significance of findings in training efficacy trends. No costs were identified relating to this project.

Impacts of COVID-19 on Project Implementation and Data Collection

On March 11, 2020, the World Health Organization declared a global pandemic in relation to the rapidly spreading beta coronavirus SARS-CoV-2, or as it has become more popularly known, COVID-19 (CDC, 2020). This declaration was promptly followed by an implementation of social distancing measures across the US in attempt to flatten the epidemiologic curve of the disease, thereby lessening the impact of the virus. The west coast was

hit especially hard and saw some of the most rapid rises in both positive cases and COVID related deaths (Oregon Health Authority, 2020; Washington Department of Health, 2020).

Due to COVID-19, project implementation strategies had to be modified to meet project goals. The initial proposal included more time spent at Portland VA Women's Health Clinic, however, much of the project ended up being built and implemented virtually. Trauma Informed Care training is meant to be provided in an interactive and collaborative environment. Discussions of case studies and personal experiences further bolster buy-in and engagement with those in attendance (Trauma Informed Oregon, 2019). Due to the restrictions in place due to COVID-19 it was decided to create a 90-minute virtual training that would then be sent to the Women's Health Center staff for viewing, at their convenience. Unfortunately, by doing this, it removed the allocated, paid, meeting time set aside for staff and OB/GYN residents to attend this training, ultimately leading to a lower response rate. Additionally, per request from fellow DNP colleagues, the virtual training was also sent out to the 2020 FNP-DNP cohort for viewing and completion of additional non-clinical hours. They were asked to complete the survey as well, however, their survey responses were analyzed separate from those submitted by the Women's Health Center staff.

Another unintended effect of COVID was on data collection techniques. The initial proposal included using a post-training Likert Scale survey that all participants would complete immediately following the in-person training. In transitioning to an online format, an online survey was created and sent along with the webinar, with a request of completion of both webinar viewing and survey completion to occur within 8 days. Unfortunately, the survey was unable to be built through RedCaps as they offer limited classes. In light of this, SurveyMonkey

was used instead. This is not in concordance with OHSU QI project guidelines; however, an exception was made due to the extraneous circumstances.

Findings

Unfortunately, there were no surveys completed by Women's Health Center staff and therefore, no data was collected regarding their perceptions surrounding the efficacy and impact of the virtual TIC training. Of note, this training will remain open and available to them indefinitely, however, the survey has been closed. Brenda LaFavor will also maintain permissions to distribute and utilize training as she deems appropriate.

Additionally, the training and survey were sent out to the 2020 FNP-DNP cohort, which yielded completion of 3 surveys. The data in these surveys is not relevant to the overall project, which focused on implementation evaluation of training with the Women's Health Center setting, but did reveal minimal, yet supportive, data towards one of the projects aims. A tertiary goal of this project was to evaluate the appropriateness/need for implementation of Trauma Informed Care training at the academic level. Key findings of the 3 surveys completed by current DNP students revealed the following:

- All rated the training as very good/excellent.
- All strongly agreed that TIC training should be implemented at the academic level.
- All strongly agreed that implementation of TIC principles would be helpful to their practice and patient outcomes.

Again, this data was collected as a secondary measure after the emergence of COVID-19 and is only representative of the perceptions of 3 individuals. With that in mind, further exploration at the academic level may yield additional supportive results, and therefore warrants investigation.

Evaluation of Literature Review and Project Outcomes

Several areas of continued research were identified throughout the literature review. To begin, while it appears likely that men victims of MST suffer from many of the same long-term effects of trauma, little research has been done evaluating the true epidemiology of MST for men, and therefore little work has been done in identifying the outcomes for these men (Millegan, Wang, LeardMann, Miletich, & Street, 2016; Suris, & Lind, 2008). Rough estimates predict that around 1-3% of men are victims of MST, however, many researchers have questioned the validity of these numbers, as it is theorized that men are even less likely to report MST to their military command or medical providers (Klingensmith et al., 2014). Support and acknowledgement of male victims of MST is greatly lacking and they should not be excluded from efforts to increase reporting, support and continued research.

As discussed above, while some preliminary research has yielded results that suggest a correlation between MST and sexual dysfunction and interpersonal issues, a more thorough investigation into these social and sexual implications is warranted (Freysteinson et al., 2018; Pulverman & Creech, 2019). A more in-depth understanding of these effects will equip providers with knowledge that will allow them to foster stronger relationships with their patients. Furthermore, they will be prepared to educate their patients around intimacy related expectations, allowing for greater support while navigating complex personal issues (Pulverman & Creech, 2019).

Additionally, implementation of the formalized Trauma Informed Care training revealed need for further inquiry into two key areas: training format and evaluation of impact. Due to the impacts of COVID-19 this project was transformed from an in-person, collaborative training, to a virtual, recorded training that did not allow for audience participation. There was a general lack

of information regarding implementation of Trauma Informed Care training overall, as mentioned in the literature review above, and so it is not surprising that we have little data around efficacy of training formats. With that in mind, the Trauma Informed Oregon Trainer has previously only offered in-person, collaborative trainings, as this is the expectation set forth by Trauma Informed Oregon.

Finally, the survey completed in association with this project was aimed at evaluating the general perceived relevance and impact of this training; there were no measures put in place to evaluate whether or not Trauma Informed Principles were implemented into the Women's Health Center clinic, or whether/how clinicians and medical staff altered their behaviors to be reflective of providing trauma informed care. Again, as mentioned above, there was only a single study found in which these types of measures were evaluated. While the Green et. al (2015) study did find favorable outcomes, this evaluative process will need to be replicated in order to truly capture the impact and efficacy of the training.

Moving Forward

The emergence of COVID-19 and resultant implication on this project has left many possible areas of further investigation. An initial first step in carrying this work forward could begin with re-engaging with the Portland VA Women's Health Center staff. Efforts would focus on ensuring completion of the training and survey, to allow for the intended data collection and analysis. Given the time, it would also be appropriate to consider and in-person follow-up to gather more qualitative analysis, should the staff be willing to participate in the training.

In addition, the established relationship with Trauma Informed Care Trainer Molly Oberweiser-Kennedy allows for many more possibilities. Once allowed back into clinical settings, a student could aim to implement the originally planned in-person training. If able to

complete this, as well as engage WHC staff in completing the virtual training and survey, one would be able to compare perceived efficacy and impact of virtual vs. in-person training. Also, this relationship would allow for the implementation of a second training. The virtual training that was built and distributed was a foundational training, and many additional training avenues exist.

Furthermore, efforts could be aimed at creating a new training that is specific to students within the OHSU SON NP programs. This could be a singular foundational training, or a series of several trainings, aimed at enhancing Trauma Informed Care Principles and Trauma Specific Practice awareness and utilization. Given the rigor of the current curriculum, and the success seen in building a virtual training, it would be possible to provide these trainings to students in a virtual setting. Analysis of efficacy and impact could be more thoroughly analyzed by pairing quantitative data collection measures with a qualitative evaluation made possible by evaluation of a TIC specific OSCE. These additional means of review and analysis would make data more externally validating and compelling for future work.

Summary

Unintended findings suggest a possible potential for positive impact through implementation of formalized TIC training for students pursuing patient care degrees, specifically NP related degrees. Additionally, the need is apparent and undeniable; trauma is negatively affecting millions across our nation and is resulting in poor mental health, negative physical concomitants, and increased morbidity and mortality (Machtinger, et al, 2015). Learning how to engage trauma survivors will further national efforts to meet the quadruple aim goals of optimizing patient experience, improving population health, reducing costs, and maintaining care-team wellness (Sikka et al., 2015).

In summation, the purpose of this project was to increase Portland VA Women's Health Center staff confidence and competence in providing wholistic care to female patients with military sexual trauma histories. Success was unable to be analyzed by this researcher, as no surveys were completed by the posted deadline. It is unclear how many of the Portland VA Women's Health Clinic providers and staff have participated in a training built through collaboration with VA partners, however, this training will continue to remain available to them with hopes that it will enhance the knowledge and skillset needed to provide comprehensive and patient-centered trauma informed care to patients with trauma histories.

An unintended finding that is resultant from COVID-19 project impacts was the collection of data from FNP-DNP students who were offered the training. While the inclusion of FNP-DNP students was not an initial goal of this project, the limited responses due suggest potential for need and desire for this type of training to be included at the academic level. For the purposes of next steps, I feel this yields a promising, albeit limited, support for pursuing a trial implementation of the training, with appropriate analysis and review, as noted above. Regardless of where this project goes next, there is great potential in increasing provider comfort in addressing trauma, provider resiliency, and ultimately patient outcomes, and therefore further efforts are not only warranted, but strongly encouraged.

References

Ayanian, J. Z. (2020, April). Mental health needs of health care workers providing frontline COVID-19 care. In *JAMA Health Forum* (Vol. 1, No. 4, pp. e200397-e200397). American Medical Association.

- Barth, S. K., Kimerling, R. E., Pavao, J., McCutcheon, S. J., Batten, S. V., Dursa, E., . . .
Schneiderman, A. I. (2016). Military Sexual Trauma Among Recent Veterans: Correlates
of Sexual Assault and Sexual Harassment. *Am J Prev Med*, *50*(1), 77-86.
doi:10.1016/j.amepre.2015.06.012
- Bergman, A. A., Hamilton, A. B., Chrystal, J. G., Bean-Mayberry, B. A., & Yano, E. M. (2019).
Primary Care Providers' Perspectives on Providing Care to Women Veterans with
Histories of Sexual Trauma. *Womens Health Issues*, *29*(4), 325-332.
doi:10.1016/j.whi.2019.03.001
- Brignone, E., Gundlapalli, A. V., Blais, R. K., Kimerling, R., Barrett, T. S., Nelson, R. E., . . .
Fargo, J. D. (2017). Increased Health Care Utilization and Costs Among Veterans With a
Positive Screen for Military Sexual Trauma. *Med Care*, *55 Suppl 9 Suppl 2*, S70-S77.
doi:10.1097/MLR.0000000000000767
- Burns, B., Grindlay, K., Holt, K., Manski, R., & Grossman, D. (2014). Military sexual trauma
among US servicewomen during deployment: a qualitative study. *Am J Public Health*,
104(2), 345-349. doi:10.2105/AJPH.2013.301576
- Calhoun, P. S., Schry, A. R., Dennis, P. A., Wagner, H. R., Kimbrel, N. A., Bastian, L. A., . . .
Straits-Troster, K. (2018). The Association Between Military Sexual Trauma and Use of
VA and Non-VA Health Care Services Among Female Veterans With Military Service in
Iraq or Afghanistan. *J Interpers Violence*, *33*(15), 2439-2464.
doi:10.1177/0886260515625909
- Center for Disease Control (2020). Coronavirus disease 2019: situation summary. Retrieved
from: [https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/summary.html#risk-
assessment](https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/summary.html#risk-assessment)
- Conard, P. L., Young, C., Hogan, L., & Armstrong, M. L. (2014). Encountering women veterans
with military sexual trauma. *Perspect Psychiatr Care*, *50*(4), 280-286.
doi:10.1111/ppc.12055
- Creech, S. K., & Borsari, B. (2014). Alcohol use, military sexual trauma, expectancies, and
coping skills in women veterans presenting to primary care. *Addict Behav*, *39*(2), 379-
385. doi:10.1016/j.addbeh.2013.02.006
- Forman-Hoffman, V. L., Mengeling, M., Booth, B. M., Torner, J., & Sadler, A. G. (2012).
Eating disorders, post-traumatic stress, and sexual trauma in women veterans. *Mil Med*,
177(10), 1161-1168. doi:10.7205/milmed-d-12-00041
- Freysteinson, W. M., Mellott, S., Celia, T., Du, J., Goff, M., Plescher, T., & Allam, Z. (2018).
Body Image Perceptions of Women Veterans With Military Sexual Trauma. *Issues Ment
Health Nurs*, *39*(8), 623-632. doi:10.1080/01612840.2018.1445327
- Goldberg, S. B., Livingston, W. S., Blais, R. K., Brignone, E., Suo, Y., Lehavot, K., . . .
Gundlapalli, A. V. (2019). A positive screen for military sexual trauma is associated with
greater risk for substance use disorders in women veterans. *Psychol Addict Behav*, *33*(5),
477-483. doi:10.1037/adb0000486
- Goyal, V., Mattocks, K., Bimla Schwarz, E., Borrero, S., Skanderson, M., Zephyrin, L., . . .
Haskell, S. (2014). Contraceptive provision in the VA healthcare system to women who
report military sexual trauma. *J Womens Health (Larchmt)*, *23*(9), 740-745.
doi:10.1089/jwh.2013.4466
- Goyal, V., Mattocks, K. M., & Sadler, A. G. (2012). High-risk behavior and sexually transmitted
infections among U.S. active duty servicewomen and veterans. *J Womens Health
(Larchmt)*, *21*(11), 1155-1169. doi:10.1089/jwh.2012.3605

- Green, B. L., Saunders, P. A., Power, E., Dass-Brailsford, P., Schelbert, K. B., Giller, E., . . . Mete, M. (2015). Trauma-informed medical care: CME communication training for primary care providers. *Fam Med*, *47*(1), 7-14. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25646872>
- Ho, C. S., Chee, C. Y., & Ho, R. C. (2020). Mental health strategies to combat the psychological impact of COVID-19 beyond paranoia and panic. *Ann Acad Med Singapore*, *49*(1), 1-3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4316735/pdf/nihms-617075.pdf>
- Holliday, R., & Monteith, L. L. (2019). Seeking help for the health sequelae of military sexual trauma: a theory-driven model of the role of institutional betrayal. *J Trauma Dissociation*, *20*(3), 340-356. doi:10.1080/15299732.2019.1571888
- Kehle-Forbes, S. M., Harwood, E. M., Spont, M. R., Sayer, N. A., Gerould, H., & Murdoch, M. (2017). Experiences with VHA care: a qualitative study of U.S. women veterans with self-reported trauma histories. *BMC Womens Health*, *17*(1), 38. doi:10.1186/s12905-017-0395-x
- Kimerling, R., Makin-Byrd, K., Louzon, S., Ignacio, R. V., & McCarthy, J. F. (2016). Military Sexual Trauma and Suicide Mortality. *Am J Prev Med*, *50*(6), 684-691. doi:10.1016/j.amepre.2015.10.019
- Kimerling, R., Pavao, J., Valdez, C., Mark, H., Hyun, J. K., & Saweikis, M. (2011). Military sexual trauma and patient perceptions of Veteran Health Administration health care quality. *Womens Health Issues*, *21*(4 Suppl), S145-151. doi:10.1016/j.whi.2011.04.007
- Kintzle, S., Schuyler, A. C., Ray-Letourneau, D., Ozuna, S. M., Munch, C., Xintarianos, E., . . . Castro, C. A. (2015). Sexual trauma in the military: Exploring PTSD and mental health care utilization in female veterans. *Psychol Serv*, *12*(4), 394-401. doi:10.1037/ser0000054
- Klingensmith, K., Tsai, J., Mota, N., Southwick, S. M., & Pietrzak, R. H. (2014). Military sexual trauma in US veterans: results from the National Health and Resilience in Veterans Study. *J Clin Psychiatry*, *75*(10), e1133-1139. doi:10.4088/JCP.14m09244
- Landes, S. J., Garovoy, N. D., & Burkman, K. M. (2013). Treating complex trauma among veterans: three stage-based treatment models. *J Clin Psychol*, *69*(5), 523-533. doi:10.1002/jclp.21988
- Lutwak, N. (2014). Physicians at veterans administration hospitals need to be knowledgeable about military sexual trauma in women. *J Clin Psychiatry*, *75*(12), e1442. doi:10.4088/JCP.14lr09396
- Machtiger, E. L., Cuca, Y. P., Khanna, N., Rose, C. D., & Kimberg, L. S. (2015). From treatment to healing: the promise of trauma-informed primary care. *Womens Health Issues*, *25*(3), 193-197. doi:10.1016/j.whi.2015.03.008
- Mattocks, K. M., Haskell, S. G., Krebs, E. E., Justice, A. C., Yano, E. M., & Brandt, C. (2012). Women at war: understanding how women veterans cope with combat and military sexual trauma. *Soc Sci Med*, *74*(4), 537-545. doi:10.1016/j.socscimed.2011.10.039
- Millegan, J., Wang, L., LeardMann, C. A., Miletich, D., & Street, A. E. (2016). Sexual Trauma and Adverse Health and Occupational Outcomes Among Men Serving in the U.S. Military. *J Trauma Stress*, *29*(2), 132-140. doi:10.1002/jts.22081
- Monteith, L. L., Smith, N. B., Holliday, R., & Pietrzak, R. H. (2018). Psychiatric and Interpersonal Correlates of Suicide Ideation in Military Sexual Trauma Survivors: The National Health and Resilience in Veterans Study. *Chronic Stress (Thousand Oaks)*, *2*. doi:10.1177/2470547018815901

- Oregon Health Authority (2020). COVID 2019 updates: situation in Oregon. Retrieved from: <https://govstatus.egov.com/OR-OHA-COVID-19>
- Pandey, N., Ashfaq, S. N., Dauterive, E. W., 3rd, MacCarthy, A. A., & Copeland, L. A. (2018). Military Sexual Trauma and Obesity Among Women Veterans. *J Womens Health (Larchmt)*, 27(3), 305-310. doi:10.1089/jwh.2016.6105
- Pulverman, C. S., & Creech, S. K. (2019). The Impact of Sexual Trauma on the Sexual Health of Women Veterans: A Comprehensive Review. *Trauma Violence Abuse*, 1524838019870912. doi:10.1177/1524838019870912
- Raja, S., Hasnain, M., Hoersch, M., Gove-Yin, S., & Rajagopalan, C. (2015). Trauma informed care in medicine: current knowledge and future research directions. *Fam Community Health*, 38(3), 216-226. doi:10.1097/FCH.0000000000000071
- Sikka, R., Morath, J. M., & Leape, L. (2015). The Quadruple Aim: care, health, cost and meaning in work. *BMJ Qual Saf*, 24(10), 608-610. doi:10.1136/bmjqs-2015-004160
- Suris, A., & Lind, L. (2008). Military sexual trauma: a review of prevalence and associated health consequences in veterans. *Trauma Violence Abuse*, 9(4), 250-269. doi:10.1177/1524838008324419
- Valdez, C., Kimerling, R., Hyun, J. K., Mark, H. F., Saweikis, M., & Pavao, J. (2011). Veterans Health Administration mental health treatment settings of patients who report military sexual trauma. *J Trauma Dissociation*, 12(3), 232-243. doi:10.1080/15299732.2011.551510
- Washington Department of Health (2020). 2019 novel coronavirus outbreak. Retrieved from: <https://www.doh.wa.gov/emergencies/coronavirus>

Appendix A

What is your current role/job/title?					
How many years have you worked in healthcare?	Student	0-5 years	5-10 years	10+ years	
Overall, how would you rate the training?	Poor	Fair	Good	Very Good	Excellent
1. I had not previously received formalized trauma informed care training.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2. This training should be provided at the academic level for all	Strongly disagree	Disagree	Neutral	Agree	Strongly agree

healthcare providers (offered while in school).					
3. I feel more competent in performing trauma specific exams/skills.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
4. I feel more confident in addressing patient trauma.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
5. Patient's trauma histories should be considered when developing care plans.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
6. Through use of trauma informed care guided principles patient outcomes will be improved.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
7. I will utilize the principles/skills learned from this training in practice.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
8. Is there any additional feedback you would like to offer?					

Link to online survey: <https://www.surveymonkey.com/r/W9LM96D>