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Race-based Trauma Care Training for Veteran’s Health Administration Nurse Practitioners

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RACE-BASED TRAUMA CARE TRAINING FOR
VETERAN’S HEALTH ADMINISTRATION NURSE PRACTITIONERS

Doctor of Nursing Practice Project Presented to the
Faculty of Graduate Studies
University of Missouri – St. Louis

In Partial Fulfillment of the Requirements
For the Degree of Doctor of Nursing Practice
by
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Abstract

Problem: Trauma informed care has become a priority for persons exposed to psychological, physiological, emotional consequences as a result of traumatic experiences. Veterans are from different cultures, including gender, race, religion, sexual orientation and other social groups. The Veterans Health Administration (VHA) is responsible for the health of this culturally diverse patient population. Healthcare providers without any prior military experience may experience difficulty obtaining an accurate history and physical exam due to the military’s cross-cultural environment. The project aim was to increase confidence and competence in race-based trauma care by incorporating training into a new acute care fellowship curriculum for the novice nurse practitioner.

Methods: A prospective descriptive design utilized a purposeful sample of senior adult-geriatric nurse practitioner (AGNP) students studied during the first six-weeks of a new acute care fellowship pilot program. Outcome measures included evaluation of skills identifying racial differences, and confidence in applying culturally sensitive care.

Results: Participants (N=3) self-reported confidence increased by .33 (20%) in providing culturally competent and race-based trauma care, and they had improvement in identifying race-based differences by .33 (17%).

Implications: Results of this pilot indicated some improvement in confidence and competence when providing race-based trauma care within six-weeks. Continued training and evaluation throughout the 12-month nurse practitioner fellowship are recommended.
Race-Based Trauma Care Training for Veterans Health Administration Nurse Practitioners

The U.S. Department of Veterans Affairs (VA) estimated there are 20.4 million veterans in the U.S. (VA, 2016a). Veterans are from different cultures, including gender, race, religion, sexual orientation and other social groups. The Veterans Health Administration (VHA) is responsible for the health of this culturally diverse patient population who present with many complex health needs, including psychosocial needs. Healthcare providers without any prior military experience may experience difficulty obtaining an accurate history and physical exam due to the military cross-cultural environment.

A gap in culturally sensitive health education exists and lends to the concerns of a medical professional’s ability to provide culturally competent care, especially within the VHA system and when training NPs. The American Association of Colleges of Nursing (AACN) published, the Essentials of Doctoral Education for Advanced Nursing Practice whereby a recommendation for a transformational change in educational preparedness for the advanced practice registered nurse (APRN) was noted (AACN 2006, cited in Ahmed, Andrist, Davis & Fuller, 2018). The AACN provided eight essentials, with two essentials addressing the preparation of the APRN in providing and demonstrating sensitivity to diverse organizational cultures and populations (AACN 2006, cited in Ahmed et al., 2018). In addition, the evaluation of care delivery models related to cultural and socioeconomically dimensions of health were emphasized (AACN 2006, cited in Ahmed et al., 2018).

Physicians and APRNs are an integral part of the healthcare system providing most of the primary care in the U.S. Physicians account for approximately 350,000
providers, and APRNs, primarily nurse practitioners (NP’s), supply just over 248,000 providers (American Association of Nurse Practitioners [AANP], 2018). Furthermore, there are nearly 6000 NP’s employed within the VHA system across the U.S (VA, 2016b). Based on the diversity of VHA patients, a commitment from nursing and medical communities to produce culturally diverse healthcare providers should be an expectation.

The Association of American Medical Colleges (AAMC) reported patient care could be impacted across the nation due to a projected shortage of 120,000 physicians by 2030 (AAMC, 2018). While the number of APRN’s is increasing, the complexity and diversity of patients is also increasing with many NPs who will need to manage patients for acute and chronic healthcare needs (Ahmed et al., 2018). Bias, prejudices and stereotyping can result in lower-quality healthcare, especially to racial and ethnic minority populations (Smedley, 2003). The U.S. Department of VA National Center for Veterans Analysis and Statistics (2016) expect a 4 -25% increase in women veterans. In addition, Hispanics and Blacks in the U.S. military are expected to increase over the next few years and cultural competency training will be needed to reduce provider bias. Cultural competence education and training has been found to improve patient-provider communication and improved patient-centered care (Chun, 2010). Veterans deserve quality healthcare for their service, including a culturally competent provider.

Veterans are a vulnerable population, especially veterans of war. Many experience physical, mental and social disparities in society after wartime. While some have obvious, newly acquired physical disabilities, others suffer from less obvious social or mental health issues including depression, anxiety, and post-traumatic stress disorder.
A common result of trauma is PTSD and has been attached to observed discrimination, race-related verbal aggression, racial stigmatization, combat experience, and interpersonal violence (Basset et al., 2013). Ehlers et al. (2013) estimated 11 - 20% of veterans suffer from PTSD and often will self-medicate with drugs or alcohol, contributing to the comorbid condition of alcohol and substance abuse. The predicted effects on veteran women, Hispanics and Blacks are unknown. Cultural competence is not a specialized phase of medical care; however, it is a critical part in the overall excellence in health care delivery. Racial discrimination awareness in the form of race-based trauma care is founded upon a person-centered approach, and empowerment strategies with an attempt to prevent re-traumatization from racial discrimination (Kelly, Boyd, Valente, & Czekanski, 2014).

The APRN’s employed by VHA lack race-based trauma training as no formal training programs are available. Carter and Forsyth (2009) found the effectiveness of assessment and treatment for culturally diverse patients may be dependent upon an understanding of how race might influence the patient and their own development and behavior; learn about the patient’s life circumstances, background, and ways of responding to their environment; and to understand how the healthcare provider’s life experiences and training might contribute to missing the patient’s issues, discounting the racial issue, or to change the topic altogether. Hence, addressing race disparities is essential to caring for veterans.

The objective of this evidence-based practice project was to incorporate race-based trauma training in a newly developed adult geriatric acute care nurse practitioner (AGACNP) fellowship curriculum for adult-geriatric nurse practitioner (AGNP) students
in their last semester of residency in a Midwestern VHA system. The aim of this pilot study was to increase confidence and competence when delivering race-based trauma care. The questions for study were:

1. What was the rate of self-reported cultural sensitivity confidence after six-weeks of raced-based training when compared to the time before training?
2. What was the rate of identification of race-based differences after six weeks of raced-based trauma training when compared to the time before training?

**Review of Literature**

A review of the literature was performed using several databases including: the Medical Literature and Retrieval System Online (Medline), ProQuest, Cumulative Index to Nursing and Allied Health Literature (CINAHL), the Educational Resources Information Center (ERIC); Science Direct and Google Scholar. The searches included keywords such as: nurse practitioner; cultural competence, patient-centered care, trauma informed care, race respect, social determinates of health, veterans, and race-based trauma. The inclusion criteria were: English language; published between 1980 and 2018; and peer-reviewed. Opinion papers and abstracts for grant funding were excluded. The initial search identified 71 articles. All relevant articles were further evaluated for content; research design; data collection methods; sample size; instruments used; and methods used. None of those found in this literature search discussed race-based trauma training for the APRN, nor was training recommended for the APRN when providing cultural care to the veteran population found and is identified as a gap in the literature. Regardless, there were 10 publications selected for this literature review.
There is a current shortage of primary care providers in the U.S. with the shortage predicted to worsen. The American College of Physicians (ACP) estimated a 39% increase in primary care physicians needed to meet preventive and health care needs in the U.S. by 2020 (Institute of Medicine [IOM], 2011). The IOM has promoted the development of new health care initiatives to aid in meeting provider demands, including the increase in the utilization of NPs in primary care (IOM, 2011). Furthermore, the National Organization of Nurse Practitioner Faculties [NONPF] (2016) discussed the necessity for NPs to be accepted as qualified health care providers, and trained in the acute, chronic and diverse needs of patients (NONPF, 2016).

Approximately 248,000 NP's are board certified to practice in the U.S. (AANP, 2018). The APRN Consensus Model recognized four types of APRNs: NP, clinical nurse specialist (CNS), nurse midwife (NM) and nurse anesthetist (NA) (National Council of the State Boards of Nursing [NCSBN], 2008). The NP education and training occurs in one of six populations of foci: neonatal, pediatric, adult-geriatric, family, women and gender health, and psychiatric mental health (NCSBN, 2008). Of these, the adult-geriatric and pediatric populations must select primary or acute care training for board-certification eligibility. Additionally, an NP must become academically prepared for advanced practice with a master of science in nursing (MSN) or a doctor of nursing practice (DNP) degree, however, the AACN recommended NP entry level to be the DNP by 2015 (AACN, 2006). The IOM (2011) recommended APRNs to be able to practice at their level of education and training and is known as full practice authority. While 23 states have granted full practice authority to APRNs, 27 states continue to require various forms of physician supervision and restrictions to practice.
In 2016, the VHA granted full practice authority to APRNs employed in its system, regardless of the state in which the NP practiced. The VHA provides care to a culturally diverse population. Camphinha-Bacote (1999) developed a model of cultural competency practiced in any area that provides health care. The model consists of five interdependent constructs (cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire) considered to be the hallmark for gauging cultural competence (Camphinha-Bacote, 1999). Furthermore, the model demonstrates a direct relationship between the level of competence from the health care providers and their ability to provide culturally responsive health care services. Cultural competence was key to providing effective and successful health services (Camphinha-Bacote, 2002). Incorporating a model of cultural competency is necessary in the VHA due to the diversity of the population it serves.

Racial biases from healthcare providers may contribute to health disparities among cultures influenced by race or ethnicity. In the IOM (2003) report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*, health care providers who exhibited implicit racial and ethnic biases, had a direct effect on healthcare outcomes. Healthcare provider implicit biases contributed to disparities in their judgement and medical decision-making which impacted the input on communication and interactions, and may have impacted patient engagement and trust. More importantly, healthcare providers were perceived to be in a position of power as the gatekeeper; therefore, they were able to affect health disparities by the differential access to treatments or services (van Ryn & Fu, 2003).
Racial and socioeconomic bias may impact healthcare delivery. Physician perceptions of patients were studied by vanRyan and Burke (2000) when race and socioeconomic status were observed. White physicians reported having less favorable perceptions with Black patients in 618 patient encounters. Black patients were perceived as more likely to be noncompliant and less intelligent, and have a tendency towards substance abuse (van Ryn & Burke, 2000). Likewise, physicians perceived persons of lower socioeconomic status to be less intelligent and with negative personality characteristics (van Ryn & Burke, 2000). Moreover, racial and ethnic disparities in health status have been well documented among the veteran population. As part of their military experience, minority veteran groups have reported perceived racism and racial/ethnic discrimination, making it possible these experiences had influenced their health status (IOM, 2003; Saha et al., 2008; Smedley, 2003).

Saha et al. (2008) reported racial disparities in the VHA exist across a wide range of clinical areas and service types. Medication adherence and invasive procedures were cited as the areas where most disparities existed. Disparity was affected by the quantity and quality of patient–provider communication, shared decision making, and patient participation (Saha et al., 2008). Furthermore, their study indicated several reasons for the disparities, including racial differences in patients’ medical knowledge and information sources; trust and skepticism; levels of participation in health care interactions and decisions; social support and resources; clinician judgment/bias; the racial/cultural milieu of health care settings; and differences in the quality of care at facilities attended by different racial groups (Saha et al., 2008).
Studies suggested when healthcare providers were trained in cultural competence, provider bias was reduced and patient-provider communications improved (Chun, 2010; Smedley, 2003; Stone & Moskowitz, 2011). Likewise, Brommelsiek, Peterson and Knoop-Amelung (2018) demonstrated cultural competence training improved patient-centered care. They studied 54 graduate students, 22 (40.7%) NP students, nine (16.7%) pharmacy students, 10 (18.5%) clinical psychology students, and 13 (24.1%) social work students who participated in an educational course on military culture (Brommelsiek et al., 2018). Student demographics reported over 70% identifying as White, and 82.4% were female, aged 23- to 54- years (Brommelsiek et al., 2018). Students were evaluated on their knowledge and attitudes concerning veterans at the beginning and end of an eight-week immersion course and found improvement in understanding military culture and veteran health (mean [SD] pre-course = 6.02 [1.25], post-course = 6.94 [1.06], p = .000) (Brommelsiek et al., 2018).

Cultural competence training was designed to expand cultural awareness, cultural knowledge, and cultural skills, leading to change in behaviors and patient-provider interactions (Brach & Fraser, 2000). Brach and Fraser (2000) emphasized training as one of the techniques for health system use in obtaining culturally competent providers. Training can be part of an orientation, fellowship, or ongoing continued education effort, and as a one-time occurrence or integrated throughout a curriculum (Brach & Fraser, 2000). Hence, incorporating race-based trauma care education and training into an acute care NP fellowship program may be of value to the VHA.

The experiential learning model (ELM) was the framework used to guide this project. The ELM emphasized the importance of experience in the learning process with
a person learning from direct experience or by doing (Kolb, 1984). The ELM contained four stages: concrete experience, reflective observation, abstract conceptualization and active experimentation (Kolb, 1984). This project exposed the senior AGNP student participant to a concrete experience. Each didactic training class and patient encounter may be a new experience and may create an opportunity for learning. In the concrete experience stage, the goal for the senior AGNP student was to have them actively participate in the experience so learning could occur (Kolb, 1984).

**Methods**

**Design**

A prospective descriptive, cohort design with a self-report survey distributed pre- and post-training was used to evaluate the effectiveness of race-based trauma care training. This evidence-based practice project was incorporated into a newly designed AGACNP fellowship program for the VHA. The six-week pilot of this program occurred April 1- May 15, 2019. There were two, three-hour educational sessions including a didactic presentation, small group discussion, and interaction with participants. In addition, participants were required to complete nearly 100 hours with a preceptor while working with the veteran population in the hospital setting.

**Setting**

A Midwestern VHA system in a metropolitan area servicing approximately 65,000 veterans annually between two hospitals and seven outpatient clinics. Of these veterans, 15,000 (23%) have been diagnosed with Post Trauma Stress Disorders (PTSD). Within this VHA system there were 66 APRNs employed of whom 22 were board certified as an AGNP- primary care; two were board-certified in acute care; 14 were
board-certified as a family nurse practitioner (FNP) working in the outpatient clinics; and 28 were either clinical nurse specialist or certified nurse anesthetists.

**Sample**

A convenience sampling of AGNP students from a public university’s college of nursing was used for this project. Inclusion criteria were AGNP students in their last six weeks of residency and program completion, and who consented to participation in this study. Exclusion criteria were NP students in other populations of foci, they were not in their last semester of residency, or they did not consent to participation in this study.

**Procedures**

A planning team was formed to include the VHA chief nurse officer (CNO), a DNP student implementing an AGACNP fellowship program, and the primary investigator (PI). In September 2018, biweekly meetings began to plan an AGACNP fellowship program that included race-based trauma training for the NP at the VHA. Additionally, the CNO included consulting stakeholders such as the medical director, clinical psychologist, and technology and innovation support as needed. Through a web-based survey program, Qualtrics, the 4-point Likert-scale self-report survey questionnaire was developed. The original plan included new fellows to be selected by the CNO after completion of a competitive, internal application process at the VHA for participation in the program; however, there were no new NP hires for the facility. An alternate plan to invite senior AGNP students was developed.

**Approval Process**

Approval from the Midwestern VHA was obtained. Additionally, approvals were attained from the doctoral committee, the university institutional review board (IRB), the VHA IRB and finally, the university graduate school. There was minimal risk associated
with this study as the study evaluated results from a self-reported pre- and post-training survey. The benefits of this study were the practical and experiential activities addressing race-based trauma competency and could contribute in the reduction of racial and ethnic health disparities.

**Data Collection and Analysis**

Informed consent was obtained for participation in the AGACNP fellowship pilot program. Data was collected via the Qualtrics software program. Demographic information included age, gender, race/ethnicity, and years of nursing experience, and years of military experience (self or relative). On the self-report survey, information was recorded on the participant’s preparation for caring for a medically vulnerable population (Q4); navigating cross-culture communications (Q5); receiving specific education or training in providing healthcare to veterans (Q23), cultural sensitivity confidence (Q27 – Q30), and competence (Q25 – Q26). There were four yes/no questions, and six were four-point Likert questions, ranking from 1 (definitely not), 2 (probably not), 3 (probably yes) and 4 (definitely yes). The self-report survey was administered prior to the beginning of the pilot program to acquire baseline data about their confidence and competence when caring for a racially vulnerable population. After the six-week pilot program, the participants were given the same survey to evaluate if they found the race-based trauma training intervention to be educational, useful and valuable in enhancing their cultural awareness and sensitivity. To ensure anonymity, participants used a four-digit personal identifier as a code when completing the pre- and post-pilot program survey to correlate any changes for participants when comparisons were made.

All personal identifiers were removed. The data was coded as P-1, P-2, P-3, etc., for the pre-program survey; and E-1, E-2, E-3, etc., for the post-program survey.
Statistical Package for Social Science (SPSS) version 25 was used for all statistical analysis. Descriptive statistics and frequencies were calculated.

RESULTS

A total of three AGNP students (N=3) consented to participation. The age of participants ranged from 30-59 years. All participants were female (N=3, 100%). Two participants were White (n=2, 66.6%) and one was Black (n=1, 33.3%). Participant nursing experienced ranged from 10-25 years (Appendix A). None of the participants (n=0) served or know someone close to them who served in the military, nor did they have knowledge about the Veterans focused centered model.

One participant (n=1, 33.3%) reported little to no preparation and two (n=2, 66.6%) reported some preparation to care for a medically vulnerable population (Q4). One participant (n=1, 33.3%) reported little to no preparation and two (n=2, 66.6%) reported some preparation to navigate cross-cultural communications in their academic program (Q5). All participants (N=3, 100%) reported not having any specific education/training in providing healthcare for patients who have served in the military (Q23).

Participants (N=3, 100%) reported greater confidence in providing patient-centered care after receiving race-based training (Q27), an increase of .67 (29%). Participants also had greater ability to identify race-based differences (Q28), an increase of .33 (16.5%), and to incorporate culturally relevant information into treatment plans (Q29), which also increased by .33 (16.5%). Participants’ reported an overall confidence (Q30) increased of .33 (20%). In addition, participants (N=3, 100%) reported they were better prepared to provide culturally competent (Q25) and race-based trauma care (Q26).
after receiving the education and training. For providing culturally competent care an increase of .66 (25%) and their ability to provide race-based care increased by .34 (14.6%) was found (Appendix B).

Discussion

A six-week pilot study of race-based trauma training during and AGACNP fellowship program for AGNP students in their last semester of residency at the VHA revealed improvements as self-reported from the participants in confidence and competence caring for the veterans. The participants initially rated themselves low in providing racially-based patient-centered care, identification of race-based differences, incorporating racially relevant information into treatment plans and an overall confidence when delivering race-based care, but all areas were reported to have improved after six-weeks of education and training during the fellowship pilot program. The senior NP students reported an overall improvement in their perception to provide culturally competent and race-based trauma care. Ongoing education and experiences for race-based trauma care is needed for the novice acute care NP and should be a consideration or the entire 12-month fellowship program.

The AGACNP fellowship program pilot was originally planned for the novice AGACNP however, there were no new hires. Instead, AGNP students who were in the last six-weeks of their NP residency experience and program completion were recruited form a local, public university’s college of nursing for participation. There were three AGNP students who were eligible for participation in this study and all consented to participate. The opportunity to participate in a program to assist the novice NP to transition into practice was also an opportunity to enhance culturally competent care beyond the academic setting.
In the scheduled education for the AGNP student during the fellowship pilot, participants had to reflect, think about, and were encouraged to openly discuss personal bias and stereotypical beliefs that have been lived from life experiences and the environment. Two of the participants were initially quiet during the training and were reluctant to join in the discussion about their personal beliefs and experiences. However, after the first session, all participants seemed to feel more comfortable in engaging in discussion. Apparently the idea of race-based trauma care became relatable during their residency experience. The combination of educational sessions accompanied by the residency experience may have enhanced their confidence when providing care to racially diverse veterans.

A limitation of this study was the small sample size and statistical analysis of the outcome measures was unable to be calculated. Furthermore, actual measurement of race-based competency was unable to be achieved. Specific measurement for race-based competencies may be helpful, and regular evaluation of these competencies throughout the fellowship may enhance the skills of a culturally competent NP. Minimizing the effects of racism on patient treatment may occur if more NP providers are given additional education and training beyond the academic setting. Recommendations for future study include utilizing a longer implementation time frame, studies in which efforts are to increase knowledge and awareness of veterans suffering from PTSD. In addition, incorporating gender-related and sexual orientation bias may assist with social bias.
Conclusion

The results of a pilot AGACNP fellowship program suggested some improvement in culturally sensitive confidence and competence in the VHA. Education should continue, especially regarding race-based trauma care. An acute care fellowship to include a race-based trauma care educational component may assist the NP provider in transitioning to practice with a culturally diverse population. Veterans are a vulnerable population with many of them at high risk for or having PTSD. Minimizing the effects of racism during treatment for physical ailments and PTSD may occur when more NP providers are competent in proving comprehensive veteran healthcare.
References


https://dx.doi.org/10.1111%2FJ.1475-6773.2004.00263.x


Institute of Medicine [IOM]. (2003). *Unequal Treatment: Confronting Racial and Ethnic*


Appendix A

**Table 1** Demographics of Participants

<table>
<thead>
<tr>
<th></th>
<th>Participant 1</th>
<th>Participant 2</th>
<th>Participant 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>Caucasian</td>
<td>African American</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Age Range</td>
<td>45-59 years</td>
<td>30-39 years</td>
<td>45-59 years</td>
</tr>
<tr>
<td>Years as RN</td>
<td>&gt;20 years</td>
<td>10-20 years</td>
<td>&gt;20 years</td>
</tr>
</tbody>
</table>
## Appendix B

### Table 2 Cultural Sensitivity Confidence and Competence

<table>
<thead>
<tr>
<th>Cultural Sensitivity Confidence</th>
<th>Pre</th>
<th>Post</th>
<th>Increased scores</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing Patient-Centered Care (Q27)</td>
<td>2.33</td>
<td>3.00</td>
<td>+.67</td>
<td>28.76</td>
</tr>
<tr>
<td>Identifying race-based differences (Q28)</td>
<td>2.00</td>
<td>2.33</td>
<td>+.33</td>
<td>16.5</td>
</tr>
<tr>
<td>Incorporating culturally relevant information into treatment plans (Q29)</td>
<td>2.00</td>
<td>2.33</td>
<td>+.33</td>
<td>16.5</td>
</tr>
<tr>
<td>Overall Cultural Sensitivity Confidence (Q30)</td>
<td>1.67</td>
<td>2.00</td>
<td>+.33</td>
<td>19.76</td>
</tr>
</tbody>
</table>

| Competent                                                                                      |     |      |                  |      |
| Better equipped to provide culturally competent (Q25)                                          | 2.67| 3.33 | +2.67            | 24.72|
| Better equipped to provide race-based trauma care (Q26)                                        | 2.33| 2.67 | +.34             | 14.59|