A GLOBAL HEALTH IMMERSION EXPERIENCE TO GREECE AND ITS APPLICATION

TO DNP ESSENTIALS: A THEMATIC ANALYSIS

by

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A GLOBAL HEALTH IMMERSION EXPERIENCE

Abstract

Problem: Global health education and initiatives in the medical education field are gaining increased popularity, but minimal research has been performed on how these experiences align with curriculum objectives.

Objectives: This project will look to answer a two-part question as to whether a Global Health Immersion (GHI) experience is aligned with Doctorate of Nursing Practice (DNP) essentials and whether an interdisciplinary experience is aligned with this content.

Theoretical framework: The concept of reflective practice, or willingness to be open to learning about the fundamental nature of oneself, will guide this assignment.

Methods and Analysis: A qualitative, descriptive project was completed. De-identified information occurred during a GHI experience. During this time, students and faculty worked on a refugee camp in Greece. Qualitative information was analyzed using a post hoc qualitative thematic analysis. Field notes were re-read while aiming to identify significant statements that pertain to GHI in DNP education. These responses were extracted and coded to identify themes.

Results: Through the GHI, participants succeeded in contributing to each of the eight DNP essentials.

Potential Significance & Implications: This project shows a connection with interdisciplinary GHI experiences and DNP essentials, providing reason for this topic to be further explored in future nurse practitioner research.
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Background and Significance

The globalization of health care, along with integration of many cultures into the fabric of our society, has created a global health care environment. As global health increases, incorporating this content into the Doctorate of Nurse Practitioner (DNP) curricula should be a natural progression. Global health education refers to the knowledge, skills and communication techniques that are utilized in research and clinical practice that allow a practitioner to identify and serve marginalized populations affected by political, social and economic health determinants (Peluso, Hafler, Sopsma & Cherlin, 2014). Global health experience and education can provide immense value to higher education in the nursing field and although they are gaining increased popularity, minimal research has been performed on how these experiences align with curriculum objectives.

Global health electives, experiences and initiatives in medical education have gained increasing popularity and growth over recent years. In a review of 129 medical schools, approximately half have established initiatives for global health (Crump & Sugarman, 2008). Global health experiences are also much needed, with the World Health Organization (WHO) reporting critical shortages of health care professionals in developing countries (Withers, Browner & Aghaloo, 2013). Global health education is also increasing in demand, with medical students expressing desire for global health courses abroad, clinical and research opportunities in global health (Herbst de Cortina, Arora, Wells & Hoffman, 2016). Along with a need and demand, global health has also been cited as an area of national importance. According to Health People 2020, a government initiative to improve health in the United States (U.S.), global health is an issue of national and global security as public health events across the world such as the
Ebola Virus outbreak, Zika Virus, H1N1, SARS and have had an impact on health in the U.S. (USDOHHS, 2018).

Merson and Page (2009) examined the recent increase in interest in global health in U.S. higher education and suggested three root causes for this expanded interest. They cite the first cause as being an increased in student awareness of global issues. The second reason for increased interest is due to the increase in media coverage of global health issues, as well as health equity becoming a component of U.S. foreign policy. They explain the third root cause as being an expansion of resources resulting in more opportunity for faculty and students (Merson & Page, 2009).

Global Health Immersion (GHI) experiences are being sought out by students. Ogilvie et al. (2007) proposed that universities that do not accomplish an internationalizing of not only their curricula, but also research, and community service may lose relevance in higher education. A report published by The Institute of Medicine (IOM) describes the U.S. commitment to global health. This report emphasizes the importance of government and university involvement in contribution to global health goals (Institute of Medicine Committee on the U.S. Commitment to Global Health [IOM], 2009).

In 2004, the American Association of Colleges of Nursing (AACN) recommended that all advanced nursing education be moved to the doctoral level (AACN, 2015). In the past ten years, there has been a dramatic growth in DNP programs across the nation. Along with the growth of DNP programs, advanced practice nurses have been recognized as being a crucial part to meeting the health care needs of the future. The DNP essentials guide DNP programs in curriculum consistency and practice expectations (AACN, 2015) and are as follows:
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I. Scientific Underpinnings for Practice
II. Organizational and Systems Leadership for Quality Improvement and Systems Thinking
III. Clinical Scholarship and Analytical Methods for Evidence-Based Practice
IV. Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care
V. Interprofessional Collaboration for Improving Patient and Population Health Outcomes
VI. Clinical Prevention and Population Health for Improving the Nation’s Health
VII. Advanced Nursing Practice

Although GHI experiences have been researched in the field of medicine, there is a gap in the research of global health initiatives in advanced nursing education. Through a review of current literature, supplemented by a qualitative analysis of a global health mission experience in Chios and Lesbos, Greece, this assignment looks to answer the question of whether an interdisciplinary, GHI experience providing health care to Syrian, Iraqi and Kurdish refugees and how interprofessional collaborative practice contributes to alignment with DNP essentials.

The war in Syria has led to the Syrian people fleeing from conflict and created a global refugee crisis. Syrian refugees have been displaced all over the world, with numbers into the millions. The majority of the burden of accepting and housing these refugees has been placed on neighboring countries such as Lebanon and Jordan as well as many European countries (Pfortmueller, Schwetlick, Mueller, Lehmann, Exadaktylos, 2016). Refugees have experienced considerable traumatic events such as rape, torture, assaults and witnessed killings (Burchill & Pevalin, 2012) contributive to their complex physical and mental health care needs. Barriers to providing care to refugees exist and pose challenges for providers such as: language, legislation, lack of knowledge and culture (Burchill & Pevalin, 2012). The DNP students aiming to aid refugees must consider their readiness to provide culturally appropriate and sensitive care to in order to best serve their needs. As providers take into consideration the unique medical problems
and background of those they are caring for, they are participating in actively providing global health care.

Providing global health care during medical education is not a novel concept, but it has experienced considerable growth and popularity while not fully understanding its breadth and effects throughout the advanced medical education field (Kahn et al., 2013; Kulbok, Mitchell, Glick, & Greiner, 2012; Moran et al., 2015).

Qualitative descriptive studies are best applied when individual stories are sought to be shared as well an understanding of the problems or issues occurring in a setting (Colorafi & Evans, 2016). In order to understand whether the GHI aligns with DNP essentials, individual experiences will be necessary in order to identify themes. Descriptive qualitative research can also utilize observations, minimally to moderately structured interviews or focus group questions to collect information (Colorafi & Evans, 2016).

**Statement of Purpose**

**Specific Aims**

The first aim of this study was to identify existing knowledge on global health immersion experiences as related to higher education in the medical field. This aim was accomplished by a review of literature on global health immersion experiences in both medical and nurse practitioner schools across the U.S. The second and third specific aims of this study was to examine whether (1) a global health immersion experience and (2) an interdisciplinary team experience contributes to each DNP essential.

**Capstone Question**

Research Question 1: Do global health immersion experiences contributes to DNP essentials?
Research Question 2: Does working on an interdisciplinary team during a global health immersion experience contributes to DNP essentials?

**Review of Literature**

**Objective**

The objective of this literature review is to examine current literature on global health education in medical schools and nurse practitioner schools.

**Inclusion Criteria**

In order to understand the broad topic of global health education, there will be no limitation on the types of literature utilized. Examples of sources may include: systematic reviews, original quantitative, qualitative or mixed methods research studies and meta-analyses. The literature search will be limited to research conducted at or on U.S. medical and nurse practitioner programs. As current literature in preliminary searches on global health initiatives in nurse practitioner programs is lacking, medical schools are added to the analysis.

**Types of Sources**

Sources will be limited to academic journals.

**Search Strategy**

A three-step search strategy was utilized for the review. The first step was a limited search utilizing two databases: CINAHL and PubMed. The second step was an analysis of the text words of the titles and abstracts, then a subsequent search using all identified key words. Lastly, the reference lists of all articles found were searched for additional studies. The search was limited to articles written in English from January 2007 until July 2017. Terms utilized: global health experience, medical school, nurse practitioner, education.
This review explored research of global health and education. Search terms utilized included: “global health,” “education,” “nursing,” “medical education,” “nurse practitioner” and “advanced practice nursing,” separately and in combination.

**Results**

Results of the literature review were organized by concepts explored. The concepts included: global health experiences and student interest, career choices, interprofessional collaboration, student preparedness, curriculum models, ethics, reflection and impact.

**Global health experiences and student interest.**

Student interest in global health and participation in GHI experiences has bolstered in recent years. So, the appearance of research with the intent of exploring the concept of student interest and GHI experiences is not surprising. With increased student interest in GHI, comes benefits for the schools offering these types of experiences (Liebe, Elliott & Bien, 2013). Schools can use their global health programs as an incentive for enrollment of future students (Liebe, Elliott & Bien, 2013). In a survey conducted Sanford School of medicine, 85% of medical students surveyed reported interest in international global health experiences (Liebe, Elliott & Bien, 2013). Although smaller studies have been performed citing interest and growth in global health curriculum, larger studies and literature reviews are needed to confirm preliminary findings.

Although there is clear growing interest and participation in global health experiences across medical education, some studies have pointed to student disinterest in incorporation of global health into medical curriculum. Through course evaluations, focus groups and individual conversations, students at Harvard Medical School critiqued a newly established global health course into the medical curriculum (Kasper, Greene, Farmer & Jones, 2016). Students pointed to
the importance and interest in focusing on basic medical knowledge required to be a physician in the U. S., and critique the importance of learning global health issues if they only plan on practicing in the U. S. (Kasper, Greene, Farmer & Jones, 2016).

Kasper and colleagues (2016), grouped student responses to global health in medical education into pragmatic, antisocial and local categories. The pragmatic approach argues that medical students are overwhelmed with a plethora of information, requiring students to prioritize incoming information in order of importance. Students conclude that anatomy, physiology and genetics are more important than the social determinants of health (Kasper, Greene, Farmer & Jones, 2016). Other students argued that as long as they gain technical proficiency, and are able to accurately diagnose and prescribe, they will be able to help their patients regardless of what social background they have (Kasper, Greene, Farmer & Jones, 2016). Other medical students cite that patient’s social and economic problems can easily be delegated to social workers, economists and politicians (Kasper, Greene, Farmer & Jones, 2016).

It is important to note that Kasper’s findings are based on the current opinions of students at Harvard Medical School on global health education. Students did not see the importance of global health being intertwined into their curriculum (Kasper, Greene, Farmer & Jones, 2016). This finding points to more evidence needed exploring the impact of global health education.

**Global health immersion experiences and career choices.**

Some studies have examined how GHI experiences in medical schools affect future career choices of those students who have participated in them (Bruno, Imperato & Szarek, 2013; Umoren et al., 2015). The Indiana University School of Medicine formed an academic partnership with Moi University in Eldoret, Kenya. Since its formation, approximately 560 medical students have completed the 2-month global health elective. Umoren and colleagues
(2015), designed a follow up study to examine long-term career choices of the participants. They found that participants in the elective were more likely to be working as generalists in underserved settings as well as more likely to be involved in global or public health, as compared to a control group of those who did not participate in the global health elective (Umoren et al., 2015).

Bruno, Imperato & Szarek (2013), examined how global health experiences in medical schools may correlate with subsequent primary care residencies. As primary care residencies are becoming less popular with recent medical school graduates while demand for primary care positions are increasing, initiatives to encourage students to work in primary care may be beneficial for medical schools to inform medical school curricula (Bruno, Imperato & Szarek, 2013). SUNY Downstate medical students who participate in a global health experience are matched with residencies prior to approval and acceptance into the global health course. In a retrospective study, researchers analyzed rates of primary care residency selections in students who participated in a global health elective versus all US medical school seniors. Researchers found that students who participated in the global health elective matched with primary care residencies at rates higher than their counterparts (Bruno, Imperato & Szarek, 2013). Although the global health elective took place in the final year of medical school, and in some cases with the students matching with residencies prior to their participation in the trip, the findings of the research could point to commonalities among students that contribute to their choosing primary care, such as ways of thinking or other factors (Bruno, Imperato & Szarek, 2013). These deductions can potentially inform medical school curricula (Bruno, Imperato & Szarek, 2013).
Global health experiences and interprofessional collaboration

Another concept that emerged was global health experiences and interprofessional collaboration. Interprofessional collaboration has been shown to have beneficial effects on patient outcomes as well as professional practice outcomes (Zwarenstein, Goldman & Reeves, 2009; Reeves, Perrier, Goldman, Freeth & Zwarenstein, 2013). Further exploring the effects of interprofessional collaboration along with global health experiences was a combination that arose in the literature.

Yale University School of Medicine offers an interprofessional global health elective that is a year-long course offered to medical, nursing, public health and physician assistant students (Peluso et al., 2014). The course consists of modules and lectures along with group work that is student driven. Students were surveyed prior to, and at the completion of the course to explore student satisfaction and perceptions of knowledge and attitudes related to the course objectives (Peluso et al., 2014). Researchers concluded that this global health course provided a challenging, but beneficial interprofessional experience for student leaders of different disciplines. This study focused on the interprofessional portion of the course, and outlined suggestions through barriers that arose in the study. For example, although participants in the course identified the benefit of collaborating with other disciplines, they also found it difficult at times to disassociate from their own respective discipline (Peluso et al., 2014). Peluso et al. (2014) offer an example of global health education integrated into medical coursework, and although results show positive perception of course objectives related to global health education, the research does not incorporate program competencies.
Global health experiences and student preparedness.

There are many details the student and faculty must consider when preparing for global health experience. Some research has explored student preparedness including health and safety overseas (Imperato, Bruno & Sweeny, 2016). Imperato and colleagues (2016) claim that in a number of published reports, it is clear that medical schools do not do enough to prepare medical students for international experiences. In a 2010 survey of medical students on global health work, only 28% reported confidence in identifying relevant information to use in order to prepare for the global health experience (Herbst de Cortina et al., 2016). By participating in a GHI experience, students will be exposed to novel territories such as: international travel, immersion in a foreign culture and unfamiliar government, language barriers as well as a change in the amount of resources they are accustomed to (Herbst de Cortina et al., 2016).

The Working Group on Ethics Guidelines for Global Health Training recommended global health students be trained in the following areas: norms of professionalism, standards of practice, cultural competence, conflict resolution, language capability, personal safety and the implications of differential access to resources (Herbst de Cortina et al., 2016). Despite recommendations for pre-departure trainings, no current standardized curriculum exists. The University of California Los Angeles established the Global Health Education Program (GHEP) which includes a pre-departure orientation (PDO) prior to participating in the abroad portion of the program (Herbst de Cortina et al., 2016). In a retrospective study of student evaluations from the PDO, researchers looked at areas of improvement, strengths and weaknesses of the program (Herbst de Cortina et al., 2016).

Herbst de Cortina and colleagues (2016) found that students preferred small groups and in-person meetings as the most effective way to deliver pre-departure resources. Faculty
mentorship and involvement in the program was also found to be appreciated by the students (Herbst de Cortina et al., 2016). In terms of areas for improvement, students noted a desire to learn from other student’s experiences at the site (Herbst de Cortina et al., 2016). Suggestions like these can help to formulate and design current and future global health programs in higher education.

**Global health experiences and curriculum models.**

With a fivefold increase in the participation of medical students in global health experience over the past 30 years, medical students still report insufficient global health coverage during their training (Kasper, Greene, Farmer & Jones, 2016). Incorporating global health into advanced practice nursing and medical school curriculum is a logical step in many ways. Offering student preparedness, a further understanding of the global complexities of health as well as addressing the social determinants of disease are some of the benefits that global health education can offer, yet standardized curriculum models have not been adequately explored in research.

Hayward, Jacquet, Sanson, Mowafi & Hansoti (2015) explored how a global health elective in the Middle East can help achieve outcomes outlined by the Accreditation Council for Graduate Medical Education (ACGME). ACGME defined six core competencies: patient care, knowledge, practice-based learning and improvement, interpersonal communication skills, professionalism and systems-based practice (ACGME, 2014). The authors provide examples of how global health experiences provide additional exposure, thereby increasing competencies in these areas (Hayward et al., 2015). Although the authors related the experiences to ACGME competencies, no qualitative or quantitative research was performed to add support to these claims.
Other literature offers quantitative and qualitative data, but does not relate the findings to specific competencies. Yale University School of Medicine offers an interprofessional global health elective that is a year-long course offered to medical, nursing, public health and physician assistant students (Peluso et al., 2014). The course consists of modules and lectures along with group work that is student driven. Researchers concluded that this global health course provided a challenging, but beneficial interprofessional experience for student leaders of different disciplines. Focusing on the interprofessional portion of the course, the researchers outlined suggestions through barriers that arose in the study. For example, although participants in the course identified the benefit of collaborating with other disciplines, they also found it difficult at times to disassociate from their own respective discipline (Peluso et al., 2014). Peluso and colleagues (2014) offer an example of global health education integrated into medical coursework, and although results show positive perception of course objectives related to global health education, the research does not incorporate program competencies.

Similar to this, Khan et al. (2013) conducted a literature review on current global health education in US medical schools. They utilized results to formulate recommendations on how to formalize global health curriculum in medical schools by analyzing six previously published recommendations for global health curricula. Researchers found no uniformity in which medical school curricula followed published guidelines. Khan et al. (2013) did find several studies demonstrated benefits to global health education. They mention that although there are recommendations for a standardized curriculum for global health education, and US schools of public health have well defined global health curricula, there is currently no evidence that a standard curriculum provides competency in global health (Khan et al., 2013). They recommended that global health education be supported by those in positions of influence in
Weill Cornell Medical College has had an established abroad program for decades, but recently developed and designed a global health curriculum which included five core competencies: global burden of disease, inequalities, health and human rights, research and evidence-based outcomes, key stakeholders in global health and health systems and health care delivery (Francis et al., 2012). These competencies were developed through student led meetings, syllabi reviews, articles and literature on global health education as well as personal experience of students, residents, fellows and faculty (Francis et al., 2012). The established curriculum has been met by positive feedback and high enrollment rates of students, but positive outcomes did not come without challenges (Francis et al., 2012). Researchers cited: funding, covering broad subject areas and struggles with teaching less material in a more substantive way, the continuity of the program and integration into current medical school curriculum as challenges that were faced (Francis et al., 2012).

**Global health experiences and ethics.**

Global health experiences historically began under the intent of medical missionaries and colonization. More secular intents arose with the creation of the Red Cross and focused more so on population-wide care (Melby et al., 2016). With the founding of the World Health Organization in the mid 20th century came increasing international program development and a shift from individualized health care to a population based approach (Melby et al., 2016). Due to global health experience’s historical beginnings, much current literature has examined the ethical implications of these experiences and whether the intents and goals of those participating match those of the host country.
Melby et al. (2016) identified four principles that can outline short term global health experiences and provide benefit to host countries: “emphasize cross cultural effectiveness and cultural humility, bidirectional participatory relationships, local capacity building, and long-term sustainability” (Melby et al., 2016 p. 634). Melby and colleagues highlight important aspects of participating in these trips including principles of non-maleficence, cultural humility and adequate supervision of students providing medical care while also emphasizing that the term of medical volunteerism can create a dynamic with an uneven power exchange between provider and host communities (Melby et al., 2016). Volunteers are freely able to travel while those in host countries are not in a position to say no to any charity offered, there may be an underlying assumption that those who come to volunteer are in the position of power (Melby et al., 2016). Although it can be argued that medical care in any capacity is better than none at all, it is important to realize that vulnerable populations often resort to accepting any care, even if it is inadequate (Shah & Wu, 2008). Melby and colleagues (2016) argue that if these gaps go unaddressed, the long-term sustainability of established global health initiatives will not be feasible.

Ethics should be incorporated into the curriculum of global health, along with the global burden of disease and health care delivery (Shah & Wu, 2008; Martin et al., 2014). Participation in global health experiences can encounter ethical subject matter on a more frequent basis than in a domestic clinical experience (Martin et al., 2014). Medical students in the surgical department of Emory University reported that although global health experiences interested them due to it being an opportunity to function more independently, they also reported the ethical concern in translating the risks and benefits of the procedure, as well as in truth telling in their limited prior
experience (Martin et al., 2014). In other words, the students recognized and felt an obligation to protect the patients from harm, or the ethical principle of beneficence (Martin et al., 2014).

From an ethical perspective, these experiences should not only benefit the students in an educational experience, but also have equal benefit to the host country (Shah & Wu, 2008). This benefit should be defined by the locals and not the guest (Shah & Wu, 2008). The patient should always have the right to know if their medical provider is a student, as well as have the choice as to whether or not to receive care from a student (Shah & Wu, 2008). The medical student also has a responsibility to not practice without adequate supervision, the responsibility to say “no” as well as recognize their own limitations as a student (Shah & Wu, 2008).

Other universities have joined in partnering ethics into global health curriculums. The University of Pennsylvania Medical School has partnered with Botswana Ministry of Health, forming the Botswana-University of Pennsylvania partnership (BUP) for over 10 years (Dasco, Chandra & Friedman, 2013). Like many other documented literature and analysis of global health programs, challenges such as inadequate funding, the need for strong political advocacy at the highest levels of the institution, inadequate experiences of the students and residents participating in the program, trainee preparedness as well as changes in faculty roles as the program developed and changed (Dasco, Chandra & Friedman, 2013). Researchers recommendations to incorporate ethics into the curriculum include: providing and continually assessing mutual goals and objectives while revisiting them on a regular basis with the host institution, being aware of the resource burdens that host countries may have minimizing consumption of these resources, and providing compensation when resources are utilized (Dasco, Chandra & Friedman, 2013).
Global health experiences reflection and impact.

With the advent and expansion of global health experiences has come research that has explored the types of impact these courses have had on students, faculty and institutions as a whole through reflection on these experiences. Global health experiences can be unpredictable, as certain climates: political, cultural or weather related, diseases, policies or crises can occur. It is integral to take these situations and continue to learn from them by reflecting on lessons learned. The University of North Carolina School of Medicine (UNC-SOM) has historically participated in global health initiatives, and recently examined how geopolitical events can affect the participants of these experiences (Steiner et al., 2010). Utilizing case studies of actual events that occurred with their program, Steiner et al. (2010) examined how the utilize lessons learned in order to develop preparative techniques and ideas for future trips. In 2009, students traveling to Mexico were faced with the H1N1 pandemic and subsequent CDC recommended travel restriction (Steiner et al., 2010). Also in 2009, students traveling to Honduras were faced with a political crisis and change in government while working at an on-site service project. Through constant communication with the US embassy, the students were eventually evacuated when political tensions became too high and they were placed in a potentially an unsafe situation (Steiner et al., 2010). In 2008, a group travelling to Nicaragua were affected by tropical storms that hit the area. The flooding affected travel as well as food supply. Through communication and monitoring events, the students were able to finish the project without evacuation (Steiner et al., 2010).

Through these events, UNC-SOM compiled a list of recommendations in order to improve and prepare for unpredictable events that can be encountered during global health experiences: a well-designed institutional travel policy, clear communication and information
management, responsible administrative entity and student and faculty preparation (Steiner et al., 2010). They state that a well-designed policy allows for adequate and prompt response to unforeseen situations.

There is also value in reflection of the types of global health programs offered. Scott (2013) compared the difference of a one-week intensive program under the supervision of a U.S. physician versus a four-week long program where students worked with local health care teams. The first model of global health experience offers a more intensive clinical experience with closer supervision. Because the U.S. physician has a high level of expertise, this often draws many patients to the clinic, offering the students an experience with high acuity patients (Scott, 2013). Scott (2013) highlights that although advantages to this type of global health model are apparent, it is possible that due to the brevity of the experience, students are not fully able to be immersed in the local culture. The second model of global health experience that Scott (2013) describes offers students a longer clinical experience. During this type of experience, although the patient load may be less, Scott (2013) argues there is more immersion into the local culture and health care problems unique to the area.

Thematic Analysis

Design & Methods

Research Design

A qualitative, descriptive project with a convenience sample was utilized for this project.

Subjects and Setting

The target population is the interdisciplinary team participating in providing health care on two refugee camps on the islands of Chios and Lesbos, Greece. The team included: three University at Buffalo (UB) School of Nursing faculty, five UB nurse practitioner students, two
UB Dental School faculty, four UB dental students, two George Washington University (GW) Psychiatric faculty, one GW psychiatric resident and one GW medical student, a laboratory technician, a SUNY Geneseo accounting student, a Buffalo State fashion student and a UB pre-med student for a total sample size of 22 participants. Student participants in the interdisciplinary team were selected by faculty based on application to participate in the global health program. The setting for information collection was during the interdisciplinary health care experience on the islands of Chios and Lesbos, Greece on and off of the refugee camps.

**Procedure**

De-identified information collection occurred during the GHI experience. During this time, students and faculty worked on two refugee camps with Syrian, Iraqi and Kurdish refugees on the islands of Chios and Lesbos, Greece. Patients were seen in the morning and debriefing sessions between the UB nurse practitioner students, UB nurse practitioner faculty, UB dental students, UB dental faculty, GW psychiatric residents, and GW faculty occurred in the afternoon. Field notes of daily observations in the refugee camps were taken. Daily debriefing sessions functioned as focus groups for the collection of information. Field notes included both descriptive and reflective information were written as soon as possible after the observation in order to preserve information in a timely manner. All field notes were anonymized.

**Plan for Information Management/Analysis**

Qualitative information was analyzed utilizing a post hoc qualitative thematic analysis. Field notes were re-read while aiming to identify significant statements that pertain to GHI in DNP education. These responses were extracted and coded to identify themes. Descriptive analysis was performed from the identified themes, drawing conclusions relating to the phenomenon. Information collected from debriefing sessions was interpreted utilizing the
conceptual framework of reflective practice. Threats to validity were analyzed after and during
information collection in order to assess any alternate explanations from phenomena or
observations that were made (University of Southern California [USC], 2017).

**Conceptual Framework**

The concept of reflective practice guided this assignment. Reflective practice is a concept
that originated in ancient times from philosophers such as Buddha, Plato and Lao Tzu (Abboud
et al., 2017). There is no universal definition of reflection, but it has been defined a willingness
to be open to learning about the fundamental nature of oneself (Abboud et al., 2017), as well as
described as an active definition, as in actively seeking to understand beliefs supported by
internal and external knowledge (Abboud et al., 2017). Christopher Johns, describes reflective
practice as a process. This process is also a practice of mindfulness, being present in your
practice while also reflecting on past experiences (Abboud et al., 2017).

Reflection is not only an internalized concept, from reflection, we can contemplate the
compassion that we have for others and humanity. From an internalization of these concepts
arises action to take part and contribute to the global community. There are many benefits to
self-reflective practice including: supports growing knowledge and awareness that can lead to
personal growth, behavior change and professional development (Abboud et al., 2017).

Reflective practice can also benefit a group setting, by supporting others’ development. While
individuals in a group setting open up, others must have a sense of mutual respect. In reflective
practices, ideas are also shared in a group setting in a considerate fashion (Abboud et al., 2017).

Johns (1995) offered The Model for Structured Reflection, in order to assess the depth of
reflection while learning through experience. This model offers cues that corresponds to Carper’s
(1978) four fundamental ways of knowing: empirical, aesthetic, ethical, and personal (Abboud et
al., 2017). Empirical knowing is organized knowledge that is synonymous with general laws and theories that are used to describe a certain occurrence (Johns, 1995). Aesthetic way of knowing is opposite of empirical, and is regarded as the clinician’s perceptive response, or the way they grasp or interpret a certain clinical situation (Johns, 1995). The ethical way of knowing is determining what is right or wrong. Lastly, personal way of knowing is being concerned with the knowing of the individual self (Johns, 1995).

In order to assess reflection, these cues can be continually refined (Abboud et al., 2017). The key processes of this model are: “appreciating the pattern of the particular situation, making judgements based on care needs, responding in a particular way within the situation and making judgements about the efficacy of response in meeting care needs” (Abboud et al., 2017). Reflective practice can move global education forward in advanced practice nursing settings. Simply moving through an experience is not enough to gain an informed and knowledgeable understanding. Through reflection, doctorally prepared nurses can examine their beliefs, assumptions and practices, become motivated to initiate change and continue to personally develop as well as enrich their communities. These outcomes are congruent and necessary in order to complete the DNP essentials necessary for advanced nursing practice.

The concept of reflective practice was originally utilized by education, but has been more recently applied to the field of nursing (Goulet, Larue & Alderson, 2016). Kolb (1984), constructed Kolb’s learning cycle, which describes the process of learning in four stages, which are summarized as reflective observation. This research can be applied to Kolb’s learning cycle, with the concrete experience being the global health immersion. Observations and reflections from the team utilized to collect qualitative data, through analysis of the data collected, the concepts will be related to DNP essentials.
Cultural and Ethical Issues

After outlining the nature of information to be collected and utilized and providing this information in written format, verbal consents were obtained from participants. Participants were informed that all information utilized was anonymized. It was explained that participation was completely voluntary and participants could withdraw consent at any time.

Implementation of this project must consider many factors in order to be culturally and ethically sensitive. Factors may include: historical, social, cultural, political and economic contexts (Westat et al., 2010). Culture can be defined as a shared body of beliefs, values and customs in a certain group of society (Westat et al., 2010). In order to perform a culturally competent evaluation, the culture of those being evaluated must be taken into consideration. Refugees are currently being held in camps, unable to travel to the main island of Greece, or to continue their immigration to another country. As more refugees arrive to the Greek Isles on a daily basis, this has caused an increased amount of tension on refugee camps as well as with the locals. It was important to collect information while being sensitive both to the needs of the refugees as well as the local authorities.

For this project, it was important that all information will remain confidential and anonymized. As discussions took place about certain case studies with the refugee population, it was important that their privacy be protected and no identifiable information such as name, date of birth or address was recorded.

Results

Five themes emerged from the analysis of qualitative information utilizing the concept of reflective practice: new ways of thinking, team characteristics, cultural components, future applications and self-reflection. Table 1 shows the five umbrella themes as well as each of the
concepts within those over-arching themes. While reflecting daily on their experience during the GHI, participants spoke of their perceptions of refugees, realizing privilege and thinking outside of the box. Many of the participants spoke of an inherent privilege they had, just by being born and living in the U.S. These types of comments reflected upon how their thoughts about refugees, their own life circumstances, or the political situation in general were changed just by participating in the GHI, and were grouped into new ways of thinking.

The team experience was also reflected upon consistently throughout the GHI. Undergoing novel experiences as a group made participants contemplate problem solving techniques they utilized for unforeseen circumstances. As events unfolded that participants were not prepared for, such as the disappointing reality that the Chios government would not allow any volunteers into the refugee camp, participants reflected on flexibility and acceptance of the unknowns. Subjects and themes that pertained to the team experience were grouped under the umbrella theme of team characteristics.

Another emerging theme was prevalent among conversations between the participants. Traveling to a foreign country, encountering patients who spoke several different languages, listening to refugee stories, and obliging by established rules that were different from their own, enabled participants to reflect on the umbrella theme of cultural components that arose during the GHI experience. Participants reflected on how refugees are perceived in the U.S., how it has shaped their personal preconceived notions of refugees, and how they confronted these cultural barriers during the GHI.

Moving through the GHI, participants reflected on how the experience would affect them upon their return to the U.S. They spoke of passing on new knowledge acquired and how the GHI experience will shape their future endeavors. Having mentors for life and passing on the
experience as well as the passion for service and giving back to others. The reflections that pertained to how the GHI would shape the participants future were grouped under the umbrella theme of future applications.

A predominant takeaway from the GHI experience for participants was an internal reflection and growth that they acquired. By learning from the refugees, participating in advanced practice nursing in a foreign environment, or from the immersion as a whole, the participants took time to reflect on how their personal biases, judgements and past experiences shaped their ability to empathize, validate, connect or not connect with those that they encountered during the GHI. They spoke of both positive and negative emotions that were confronted as the GHI progressed including feelings of incompetence as well as the pressure to serve those who were in need. Feelings that were expressed by participants were grouped into the category of self-reflection.

**DNP Essentials**

The specific aims of this study was to examine whether (1) a global health immersion experience and (2) an interdisciplinary team experience contributes to each DNP essential. The subsequent portion of this paper will examine how participants of the interdisciplinary team contributed to each of the eight DNP essentials by participating in the GHI experience.

1. **Scientific underpinnings for practice**

   The scientific underpinnings for doctor of nursing practice (DNP) are rooted in the actions of a mature DNP and in the fact that they acknowledge and attempt to understand and interpret the values, beliefs and ideas that inform his or her daily practice (Zaccagnini & White, 2014). The scientific underpinnings of nursing practice are based in the science that creates and defines our practice. The act of nursing has been described as a process, a discipline, an art, a set
of outcomes and a special knowledge (Zaccagnini & White, 2014). Science can be described as the study of something, or a methodological endeavor performed to gain knowledge on a subject (Zaccagnini & White, 2014). In combination of these two definitions arises nursing science, or the incorporation of nursing practice with philosophical, ethical and historical issues while creating a body of knowledge to guide nursing practice (AACN, 2006).

Global health experiences can aide DNP students in achieving this competency. By providing professional health care in a global setting, students were able to create their own body of knowledge to transfer into a future practice setting. They exemplified nursing science by immersing themselves in a foreign environment for the purpose of education and attaining a specialized knowledge. Many students spoke of taking the knowledge they received from the experience and applying it to their future practice: This is, “stuff that you can't learn in school. I've personally never experienced it. I feel an obligation to do that. You go in feeling like you made a difference.” Another student stated, “I'm very used to the same mold,” when speaking of her working environment as a nurse practitioner student in the U.S., the student went on to add that, “it's a responsibility to share your experiences.”

The roots of this essential are acknowledging what you know or have come to believe, and critically analyzing how it plays a role in how you practice as a health care professional. One of the emerging themes from the information obtained was that the GHI experience was a novel and unique learning experience, one that cannot be duplicated inside a classroom. “Compare it to the U.S., as Americans we are so far removed from traveling, I realize how little I know.” By analyzing their values, beliefs and ideas, participants in the global health experience actively contributed to the first DNP essential, Scientific Underpinnings for Practice.
II. Organizational and systems leadership for quality improvement and systems thinking

The ever changing and new demands of the health care system require serious inquiry of how DNPs will be utilized in the system to the best of their ability and to the fullest extent of their education and training. The AACN states that advances practice nurses should be prepared to assess organizations and systems issues in order to facilitate practice changes that are systems wide (AACN, 2006). The future of the advanced practice nurse is to be a visionary for health care; to move beyond traditional level thinking and improve health care on a larger scale (Zaccagnini & White, 2014). Although the U.S. health care system is often looked at as one of the best health care systems, it is fragmented and access to care is often limited while being one of the most expensive systems in the world (Woolf & Aron, 2013).

In a way, global health care experiences are the ultimate practice in a systems-thinking concept. By participating in a GHI experience, one can apply health care on a global level and further understand how policies and political situations can shape health care. Thinking on a global, or systems, level can then be applied to organizations, health care systems and policies in the U.S.

Participants in this experience spoke of feeling as if they were partaking in something that was greater than themselves, that was on a higher level than individualized care. A faculty member participating in the GHI stated, “There have never been this many refugees ever. The students now have an appreciation for being connected to a historical event, these students for the rest of their lives can relate to an event and say they were on the ground.” Students also realized that the refugee crisis had effects across the world, and that they were participating in an
important occurrence in modern history, “I don’t want to sit back and say I watched this happen,” one student participant stated.

Participants statements fell under the emerging theme of “new ways of thinking.” By analyzing what they were learning in the field and expressing a desire to not only apply a new way of thinking at home, but also realizing that events being witnessed had somewhat of a chain reaction, in that they were connected to each other on a greater level. “When we pull you out of your group. You benefit from the collective knowledge that you bring to the table. It's a freedom of discussion. You can still leave that discussion with how you internalize it. Provides you with a good base.”

Multiple participants vocalized that they planned on taking what they learned in the global setting and applying it locally, “As a person, it always helps to reground yourself. You don't have to do a ton to make a huge difference. Differences need to made outside of Buffalo,” one participant stated. Another noted that, “Now we can take what we learned here and apply it to Buffalo.” Participants contemplated looking at the whole, or a systems wide approach, and taking that knowledge and applying it at home. As another participant remarked, “this generation sees things globally. There's value in that,” which is the central take-away from this DNP essential.

**III. Clinical scholarship and analytical methods for evidence-based practice**

Clinical scholarship has been defined as a willingness to scrutinize and question our current practices (Hayes et al., 1999). Scholarship is the act of participating and generating new knowledge through scientific and social exchange with the intent on raising the level of the profession (Zaccagnini & White, 2014). Scholarship is not only based in the act of observation and analysis, but it is also imperative that what is analyzed is also applied (Hayes et al., 1999).
As a DNP, being actively involved in clinical scholarship means being updated on the most current and relevant information. It is bringing a combination of the best clinical research along with knowledge, expertise and skill into the clinical practice setting (Zaccagnini & White, 2014).

Evidenced-based practice, as opposed to clinical scholarship, is based in our clinical practice and is practice driven (Zaccagnini & White, 2014). As we connect current research with our patient’s problems, conditions and present situations, we are actively participating in evidence-based practice. As compared to other doctorally prepared practitioners, nurses add a unique, holistic perspective to evidence based practice, looking at the patient as a whole including their circumstances, economical situations, background, culture, beliefs, etc. (Zaccagnini & White, 2014).

Prior to the commencement of the trip, students and faculty participated communication in which research exchange took place via email correspondence. Reflection, contemplation and discussion of current research articles was completed before the team first met as a group. Research articles exchanged included topics of: needs of Syrian refugees and major health care needs of this population. Although current research was limited pertaining to this population, participants made an active effort to reflect on how to apply what evidence they could find to their practice during the GHI experience.

Cultural competency was stressed prior to leaving, as much research points to culturally competent care providing better patient outcomes (Darnell & Hickson, 2015; Lie et al., 2011). Upon reflecting back on a day of work during the GHI experience, one participant stated, “Everyone is trying to be culturally competent. It’s so important.” While another applied cultural competence to the GHI experience stating, “It should be natural to be open-minded towards other people’s cultures and learning about them without having a degrading attitude.” By analyzing
current research, and consciously bringing best practice to the GHI experience, participants contributed in the DNP essential III.

**IV. Information systems/technology and patient care technology for the improvement and transformation of health care.**

This essential prepares the DNP for utilizing information systems to advance their practice in many ways. Utilizing information technology and systems not only to research literature or best practices, but also to discern and critically evaluate information found online and in databases. In a health care world continually moving towards electronic medical records and computer based charting systems, both computer literacy and computer competence are essential skills needed to excel in the workforce. Computer literacy is the ability to utilize a technology to perform a variety of tasks. Computer competence is the ability to use software programs such as office, word or excel (Zaccagnini & White, 2014). These basic computer skills are the base needed for DNPs to further utilize information systems to advance the practice and future of health care.

During the GHI experience, resources were severely limited, especially pertaining to information systems and technology. Students reflected on how the lack of information systems hindered their care, but also helped them to appreciate how much it advances their care while practicing in the U.S.. One of the emerging themes found in the information was that of, “new ways of thinking.” Students used what modern technology that was available to them during the GHI experience, in this case it was limited to internet access and smartphones. Medications provided were labeled in different languages, they utilized their phones in order to translate and organize medications. One student reflected on this topic expressing, “think outside the box,
helps you think under the circumstances that you're put in. It's strengthens our skills as a practitioner by not utilizing a computer or translated phone or the resources we're used to.”

The important take away from the GHI experience was how to work around the lack of information systems and technology that the participants were accustomed to. The participants utilized what information they had to advance their practice to the best of their ability, given the situation, which is the underlying notion of this DNP essential.

**V. Health care policy for advocacy in health care.**

Advanced practice nurses are being faced with challenges in receiving reimbursement as well as practice restrictions (Zaccagnini & White, 2014). These challenges can be approached by advanced practice nurses becoming involved in health care policy reform. In an ever-changing health care environment and more concerns with the governance of health care since the initiation of the Affordable Care Act, it is integral that advanced practice nurses take an active role in evidenced based health care reform. By advocating for health care policy and reform, advanced practices nurses are advocating for patients.

Historically, the nursing profession has had involvement in health care policy in reform in different ways, often their involvement waxing and waning along with current events (Zaccagnini & White, 2014). Currently, many professional organizations have been able to lobby and create political action committees through membership dues (Zaccagnini & White, 2014). Becoming a part of a professional organization can lead to subsequent policy influence by increase in numbers.

Students participating in the interprofessional global health experience reflected on how treating the refugees opened their mind to global health policies and to the inhumanities the refugees were experiencing. When speaking of the political situation in Greece one participant
stated, “the importance of refugees and closed borders is coming to light.” They spoke of the desire to be involved in something “bigger,” a “historical event” that is taking place in the world and the feeling of happiness that they were involved and not sitting back as the world is watching events unfold. Students related current events in politics to the health care and problems they were encountering during the global health experience, speaking of the perceptions of refugees in the U.S. as well as President Trump’s travel ban. One expressed feelings of empathy stating, “I try to put myself in their shoes and imagine what I would do if that happened to me.”

During the GHI experience, the interprofessional group was directly affected by the political situation regarding the refugee camps in Greece. Although it was prearranged for the group to work and provide health care on the island of Chios, Greece, the students and faculty were prevented from working and even entering the refugee camp by the local government. Immediately prior to the start of the GHI, refugee’s frustrations were peaked as they were being kept in the camps, unable to leave to the main land of Greece or move on to other countries. Violent protests unfolded leading to fires, destruction of medical and other supplies and subsequent militarization of the camps. Despite meetings, collaboration and communication with local authorities, including the mayor of Chios, the group was not permitted to enter the refugee camp.

This GHI experience provided the participants with a spark, it helped them to critically think about how global politics are affecting the global health spectrum. Participants were able to experience first-hand how current policies can affect the care they provide.
VI. Interprofessional Collaboration for Improving Patient and Population Health

Outcomes.

Medical health care reform has defined interprofessional team as including: nurses, nurse practitioners, physician assistants, physicians, social workers, pharmacists and other health care professionals (Zaccagnini & White, 2014). When these health care professionals coordinate to provide evidenced based care, they are participating in interprofessional collaboration. The importance of interprofessional collaboration has been emphasized by professional organizations such as the American Nurses Association (ANA) as well as The American College of Physicians (ACP) (Zaccagnini & White, 2014).

During the GHI experience, nurse practitioner students and faculty planned to work alongside psychiatric residents, dental students and staff and faculty. Due to unforeseen circumstances and changes in the political climate, this was not completely accomplished. Even taking this into account, students and faculty perceived the trip as an interprofessional learning opportunity. One participant stated that, “even though we're not working with them directly, we are still working indirectly together.” They looked at this as a common cause, there for the same reasons, using each other as resources, navigating unfamiliar territory for the greater good of providing health care to the patients.

Navigating through uncharted and unfamiliar territory, problem solving as a team when faced with challenges was viewed as a bonding experience. “It has been a bonding experience. getting in a car and figuring out how to go somewhere.” They spoke about how to transfer their experiences from Greece back to the U.S. “We hit a roadblock- getting dropped off in the wrong place and figured out how to get the right location. No one got upset. Can we transfer some of these skills? Team work problem solving, and rolling with the punches?” Another student
commented, “Many grad students hate group projects. I feel more confident in doing group work. I had to reach out to four random people. I think I'll be more prepared.”

Despite working in different physical locations from each other, the team of psychiatric residents, dentists and nurse practitioners met on several occasions to debrief and reflect on their accomplishments of the day and future goals. Their separation was even looked at as having positive outcomes such as contributing to teamwork and communication skills. Overall there was a general consensus that the team as a whole was contributing to the health of the refugees.

**VII. Clinical prevention and population health for improving the nation’s health.**

This DNP essential takes into account two aspects of medicine: clinical prevention and population health. Clinical prevention includes: immunizations, screenings and behavioral change counseling (Zaccagnini & White, 2014). These are measures taken to prevent illness from occurring. Clinical prevention has also been described as health promotion. Health promotion is defined as ‘encouraging consumer behaviors most likely to optimize health potentials through health information, preventative programs and access to medical care’ (Zaccagnini & White, 2014).

Measures for improving population health have been cited as starting with the nation’s poorest and most susceptible to health problems and diseases. It has been defined to include the socioeconomic, cultural and physical environment that impacts health (Zaccagnini & White, 2014). The World Health Organization (WHO) developed the Commission on Global Health and Disease for disease prevention and to tackle health inequalities (Zaccagnini & White, 2014). Healthy People 2020 is another example of an initiative emplaced to improve population health. Established in 2010, it outlines goals and outcomes to decrease health disparities, preventable illnesses while creating environments that promote good health (U.S. Department of Health and
A GLOBAL HEALTH IMMERSION EXPERIENCE

Human Services (USDOHHS), 2018). Nurse practitioners are expected to contribute to many of the goals outlined, and by aiding in achieving these population health goals.

In order to meet this essential, the AACN cites that the DNP student must: analyze data related to population health, synthesize concepts such as cultural diversity and evaluate interventions that address improving population health, as well as evaluate models of current care delivery utilizing concepts related to the cultural and socioeconomic aspects of health (Zaccagnini & White, 2014). During the GHI experience, students expressed desires to take what they have learned from the experience and apply it back home. “As a person, it always helps to reground yourself. You don't have to do a ton to make a huge difference. Differences need to made outside of Buffalo. Now we can take what we learned here and apply it to Buffalo.”

Participants in the global health experience also realized the consequences of a lack of preventative health. “There were refugees who came in who had fillings and work done. Now they don't have access to what they used to have. By the time the refugees reached us for care, the point of prevention was missed.” Participants were aware of how the lack of access, political situation and physical environment was affecting the health outcomes of the population encountered on the GHI. They voiced the importance of providing any primary prevention measures that could be completed. Participants took time after the clinic was closed to visit the refugee school and apply fluoride varnish to all of the children present.

VIII. Advanced nursing practice.

The role of the advanced practice nurse is becoming increasingly important as the delivery of health care in the U.S. is undergoing changes in an attempt to fill gaps of care in the current system. At the core of advanced nursing practice is preventative medicine, which has been decidedly considered to be essential for the future of decreasing health care costs
A GLOBAL HEALTH IMMERSION EXPERIENCE (Zaccagnini & White, 2014). In addition to the clinical skills the DNP possesses, they are additionally trained in policy, management and economics, which lends them an advantage in ventures to improve the current health care model (Zaccagnini & White, 2014).

The AACN position paper on the practice doctorate in nursing states that nurses who are prepared on a doctoral level can not only provide advanced practice nursing care, but can also, “critique nursing and other clinical scientific findings and design programs of care delivery that are locally acceptable, economically feasible, and which significantly impact health care outcomes” (AACN, 2004, p.3). The doctorally prepared nurse provides health care by assessing, diagnosing and treating individuals, families and communities (ANA, 2010).

The participants in the GHI were able to provide direct advanced nursing practice care to refugees. They gained experience in assessing, differential diagnosis and treatment in an environment that was, at times suboptimal, but by utilizing critical thinking skills in the moment, were able to treat the patients and families with respect and dignity. The nurse practitioner students and faculty were given one open room for treatment of patients with multiple boxes of medications and supplies. By the end of the GHI, a triage system was created, barriers were emplaced for privacy, and medications and supplies were organized by disease processes. They made best of the situation they were encountered with in order to provide advanced nursing care, in attainment of the eighth DNP essential.

Discussion

As the interdisciplinary team moved through the GHI experience, the complexities that are involved with immersion in a foreign environment arose. Although it is challenging to explain these phenomenon, exploration is essential in moving forward and recognizing how GHI experiences will shape the global health perspective of current and future nurse practitioner
students. Global health is not a fleeting topic, but one that is becoming more relevant as individuals attain the means of traveling across the world more freely. The importance of population health nationally and globally has been cited by the WHO, IOM, AANC, and Health People 2020 among other national and international organizations (USDOHHS, 2018; IOM, 2009; Withers, Browner & Aghaloo, 2013; Zaccagnini & White, 2014). It is the responsibility of nurse practitioners to aid in expanding the current body of research in order to continue to perform and work by evidenced based practice.

**Recommendations**

Moving forward, it will be important for nurse practitioner schools to cite current research when creating, emplacing and developing GHI programs. It may be beneficial to explore how GHI program objectives will align DNP essentials in order to ensure that the GHI program will be of educational significance to the students. Also, of significant importance is that the host country is perceiving benefit from GHI experiences. This should be accomplished by arrangement of open dialogue between the nurse practitioner school and the host country. Students should be adequately prepared for the unique learning experiencing, participating in preliminary research applicable to the anticipated patient population. The DNP should be prepared to reflect on their experience and even consider contributing to future research.

**Limitations**

This project was completed under the authority of a lived experience. Due to the nature of the political situation and local animosity towards aiding refugees, not all proposals went as originally planned. GHI experiences can have unforeseen circumstances relating to political situations, natural disasters, or health concerns. Multiple unforeseen circumstances occurred during this GHI experience. The first being the disappointment that participants were unable to
volunteer on the refugee camp in Chios, Greece due to the militarization of the camps as refugee emotions and protests intensified. Although participants were able to volunteer on the refugee camp in Lesbos, Greece, the UB dental students and nurse practitioner students were then separated, and unable to work as an interdisciplinary unit. Due to this, the rigor of the aim of the study to examine how an interdisciplinary team contributes to DNP essentials may have been reduced.

As this was a qualitative analysis, alternative interpretations can occur. Personal bias can also affect information interpretation. As the author of this project was also a participant of this GHI experience, it is possible that the views reflected and interpretation of those views did not accurately represent what the participants truly meant to imply.

Although information was anonymized, with no names connected to any quotes utilized, there is potential for recognition of quotes or other information to be linked back to participants.

The sample size of the population of the participants was small, therefore results cannot be applied to the general population.

**Strengths**

Global health experiences and research is relatively new in the field of nurse practitioner education. It is characterized by complex experiences for participants that are not easily quantified or explained. This project provides insight to the complexities of these experiences and may point to directions of future research on GHI experiences. No quantitative information was collected for this project, but the findings may be complementary to future quantitative research on this subject matter. Themes identified in this project do correlate with existing research such as perceived benefit of collaboration with other disciplines (Peluso et al., 2014) as well as reflecting on unforeseen events that occurred during the GHI (Steiner et al., 2010).
Conclusion

As GHI experiences gain popularity, more research is necessary in order to gain a better understanding of how they align with educational requirements in nurse practitioner education.
<table>
<thead>
<tr>
<th>Theme</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>New ways of thinking</strong></td>
<td>Perceptions of refugees, perception of others, gaining perspective, reflection, realizing privilege, lack of knowledge, taking part in something bigger, understanding our circumstances, thinking outside the box, appreciation</td>
</tr>
<tr>
<td><strong>Team Characteristics</strong></td>
<td>Problem solving, communication, flexibility, adjustments, collaboration, teamwork, individuality, logistics, preparedness, working with unknowns</td>
</tr>
<tr>
<td><strong>Cultural Components</strong></td>
<td>Making the “other” real, culture differences, barriers, language barrier, global perspective, cultural competence, humility, open mindedness, less resources, being conscious of waste, not using technology, what we have versus what they have, personal stories, historical event</td>
</tr>
<tr>
<td><strong>Future Applications</strong></td>
<td>Sharing experiences, knowledge expansion, paying it forward, passing on information, making a difference, mentors, educating, spreading passion, taking the experience home</td>
</tr>
<tr>
<td><strong>Self-reflection</strong></td>
<td>Validation, empathy, sensitivity, connection, disconnected, engage, feeling incompetent, asking questions, choosing to enlighten, positivity, inquiring, pressure</td>
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A GLOBAL HEALTH IMMERSION EXPERIENCE TO GREECE AND ITS APPLICATION TO DNP ESSENTIALS: A THEMATIC ANALYSIS

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Spring 2018

Purpose of Capstone Project

- Global health education and initiatives in the medical education field are gaining increased popularity.
- Minimal research has been performed on how these experiences align with curriculum objectives.

Capstone Question

- Two part question:
  1. Does a global health immersion experience contribute to DNP essentials?
  2. Does interprofessional collaborative practice contribute to DNP essentials?

What is Global Health Education?

- Definition of global health education:
  - The knowledge, skills, and communication techniques that are utilized in research and clinical practice that allow a practitioner to identify and serve marginalized populations affected by political, social and economic health determinants (Pronko, Thrall, Papirer & Cohen, 2014).
  - Global health experience and education provides value.
Doctorally Prepared Nurses

- In 2004, the American Association of Colleges of Nursing (AACN) recommended that all advanced nursing education be moved to the doctoral level (AACN, 2015).
- Dramatic growth of DNP programs across the nation.
- Advanced practice nurses a crucial part in meeting health care needs.
- The DNP essentials guide DNP programs (AACN, 2015).

The Essentials of Doctoral Education for Advanced Nursing Practice

I. Scientific Underpinnings for Practice
II. Organizational and Systems Leadership for Quality Improvement and Systems Thinking
III. Clinical Scholarship and Analytical Methods for Evidence-Based Practice
IV. Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care
V. Health Care Policy for Advocacy in Health Care
VI. Interprofessional Collaboration for Improving Patient and Population Health Outcomes
VII. Clinical Prevention and Population Health for Improving the Nation’s Health
VIII. Advanced Nursing Practice

Background & Significance

- Global health experiences are gaining popularity in medical education (Crump & Sugarman, 2008).
- The World Health Organization (WHO) reported many developing countries are in high need of health care professionals (Withers, Browner & Aghaloo, 2013).

Background & Significance

- Studies have been performed in the medical field.
- Hayward et al. (2015) explored how a global health elective in the Middle East achieved health outcomes aligned by the Accreditation Council for Graduate Medical Education (ACGME).
- Authors did not supplement claims with conducted research.
Background & Significance

- War in Syria has created a global refugee crisis
- Their health care needs are complex
- Language barriers, cultural barriers, legislative problems cause challenges in providing health care
- As DNP students are participating in actively providing global health care (Pfortmüller, Schwetlick, Mueller, Lehmann, Exadaktylos, 2016; Burchill & Pevalin, 2012)

Background & Significance

- Global health experience and education can provide immense value to higher education in the nursing field.
- This claim should be supported by evidenced based research, which is severely lacking.
- Relating global health experiences to the DNP essentials is a step towards future research and support for global health experiences and education.

Conceptual Framework- Reflective Practice

- Originated in ancient times from philosophers such as Buddha, Plato and Lao Tzu (Abboud et al., 2017).
- Definition of reflection
  - Willingness to be open to learning about the fundamental nature of oneself (Abboud et al., 2017) as well as described as an active definition, as in actively seeking to understand beliefs supported by internal and external knowledge (Abboud et al., 2017).

Reflective Practice

- Reflection is an internalized and externalized concept
- Benefits to reflective practice
  - Supports growing knowledge and awareness that can lead to personal growth
  - Behavior change and professional development (Abboud et al., 2017)
  - Reflective practice can also benefit a group setting, by supporting others' development.
Methodology - Design

- Qualitative, descriptive
- In order to understand whether the GHI aligns with DNP essentials, individual experiences will be necessary in order to identify themes.

Methodology - Setting

- Global Health immersion experience from July 23, 2017 - July 28, 2017
- During this time, students and faculty were working on two refugee camps with Syrian, Iraqi, and Kurdish refugees on the islands of Chios and Lesbos, Greece.

Subjects

- The target population is the interdisciplinary team participating in providing health care on two refugee camps on the islands of Chios and Lesbos, Greece.
- The team includes: University at Buffalo (UB) School of Nursing faculty, UB nurse practitioner students, UB Dental School faculty, UB dental students, George Washington University (GW) Psychiatric faculty, GW psychiatric resident and GW medical student, a laboratory technician, a SUNY Geneseo student, a Buffalo state student and a UB undergraduate student for a total sample size of 23 participants.

Methods - Procedure

- De-identified information collection occurred during the GHI experience.
- Field notes of daily observations in the refugee camps were taken.
- Daily debriefing sessions functioned as focus groups for the collection of information.
- Field notes included both descriptive and reflective information written as soon as possible after the observation in order to preserve information in a timely manner.
- All field notes were anonymized.
Methodology - Data Analysis

- Qualitative data was analyzed using a post hoc qualitative thematic analysis.
- Field notes were re-read, identifying significant statements that pertain to GHI in DNP education, then coded.
- Descriptive analysis was performed from the identified themes.
- Information from debriefing sessions was interpreted utilizing the conceptual framework of reflective practice.
- Threats to validity were analyzed after and during data collection in order to assess any alternate explanations from phenomena or observations that were made (USC, 2017).

Results

- Emerging themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>New ways of thinking</td>
<td>Perceptions of refugees, perception of others, gaining perspective, reflection, realizing privilege, lack of knowledge, taking part in something bigger, understanding our circumstances, thinking outside the box, appreciation</td>
</tr>
<tr>
<td>Team characteristics</td>
<td>Problem solving, communication, flexibility, adjustments, collaboration, teamwork, individuality, leadership, preparedness, working with unknowns, working with others, language barriers, global perspectives, cultural competence, handling open boundaries, appreciation, being conscious of waste, not using technology, what we have versus what they have, personal stories, historical events</td>
</tr>
<tr>
<td>Cultural components</td>
<td>Making the &quot;other&quot; real, culture differences, barriers, language barrier, global perspective, cultural competence, handling open boundaries, appreciation, being conscious of waste, not using technology, what we have versus what they have, personal stories, historical events</td>
</tr>
<tr>
<td>Future applications</td>
<td>Sharing experiences, knowledge expansion, passing it forward, passing on information, making a difference, mentors, educating, spreading passion, taking the experience home</td>
</tr>
<tr>
<td>Self reflection</td>
<td>Validation, empathy, sensitivity, connection, engaged, feeling empowered, asking questions, choosing to enlighten, positivity, inspiring others</td>
</tr>
</tbody>
</table>

Results - DNP Essentials

Scientific Underpinnings for Practice

- DNP must acknowledge and attempt to understand and interpret the values, beliefs and ideas that inform his or her daily practice (Zaccadinni & White, 2014).
- The scientific underpinnings of nursing practice are based in the sciences that create and define our practice.

Organizational and Systems Leadership for Quality Improvement and Systems Thinking

- How DNPs will be utilized in the system to the best of their ability and to the fullest extent of their education and training?
- Global health care experiences are the ultimate practice in a systems-thinking concept.
- One can apply health care on a global level and further understand how policies and political situations can shape health care.
Clinical Scholarship and Analytical Methods for Evidence-Based Practice

• Clinical scholarship has been defined as a willingness to scrutinize and question our current practices (Hayes et al., 1999).
• Scholarship is the act of participating and generating new knowledge through scientific and social exchange with the intent on raising the level of the profession (Zaccadnini & White, 2014).
• What is analyzed must also be applied.

Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Health Care

• Utilizing information technology and systems to research literature or best practices
• Discern and critically evaluate information found online and in databases.

Health Care Policy for Advocacy in Health Care

• In an ever-changing health care environment and more concerns with the governance of health care since the initiation of the Affordable Care Act, it is integral that advanced practice nurses take an active role in evidenced based health care reform (Zaccadnini & White, 2014).
• Participants were able to experience first-hand how current policies can affect the care they provide.

Interprofessional Collaboration for Improving Patient and Population Health Outcomes

• When health care professionals coordinate to provide evidenced based care
• General consensus that the team as a whole was contributing to the health of the refugees.
Results - DNP Essentials

Clinical Prevention and Population Health for Improving the Nation’s Health

- Clinical prevention
  - Immunizations, screenings and behavioral change counseling
- Population Health
  - Start with the most susceptible

Results - DNP Essentials

Advanced Nursing Practice

- Preventative medicine
- Assessing, diagnosing and treating individuals, families and communities

GHI participants gained experience in assessing, differential diagnosis and treatment in a complex environment

Contribution to clinical scholarship

- This project shows a connection with both interdisciplinary teamwork and GHI experiences with DNP essentials, providing reason for this topic to be further explored in future nurse practitioner research

Strengths

- This project provides insight to the complexities of these experiences and may point to directions of future research on GHI experiences.
- No quantitative information was collected for this project, but the findings may be complementary to future quantitative research on this subject matter.
- Themes identified in this project do correlate with existing research such as perceived benefit of collaboration with other disciplines (Peluso et al., 2014) as well as reflecting on unforeseen events that occurred during the GHI (Steiner et al., 2010).
Limitations

- This project was under the authority of a lived experience
- Due to the nature of GHIs, not all proposal went as planned
- Alternative interpretations of information can occur.
- Potential for recognition of quotes or other information to be linked back to participants.
- The sample size of the population of the participants was small.

References


Questions/Comments?