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Exploring Significant Impacts of Global Health on Nursing Education and Resource-Poor Communities: An Integrative Literature Review

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Exploring Significant Impacts of Global Health on Nursing Education and Resource-Poor

Communities: An Integrative Literature Review

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EXPLORING SIGNIFICANT IMPACTS OF GLOBAL HEALTH ON NURSING EDUCATION AND RESOURCE-POOR COMMUNITIES

Abstract

Background: Nursing education in the United States is largely focused on health promotion at the local and community level. Modern advances in communication technology have facilitated a movement in nursing to gradually adopt a global health perspective in both practice and education.

Objective: To explore what research has been done regarding how nurse educators are impacted by adopting global health perspectives in nursing education and to suggest one potential way to add to this body of knowledge using a survey-based approach.

Methods: This integrative literature review was conducted using keywords “global health, nurse faculty, nursing education, service-learning, and nursing volunteerism” to search the literature between 2007 and 2017.

Results: This study found that recent trends in nursing education are migrating towards a more global perspective as opposed to the more commonly utilized community health perspective. Benefits of adopting a global health perspective include strengthening of several core nursing competencies and increased cultural competency in nursing students.

Conclusions: Despite the existing literature focusing on the impact of service-learning and global health perspectives in nursing on students, a knowledge gap appears to exist in the literature regarding the impact of adopting a global health perspective on nurse educators. By developing a survey designed specifically for nurse educators who have participated in service-learning abroad, future research may be guided in order to add this missing information to the existing knowledge base regarding the impact of global health perspectives on nursing education.

Keywords: global health, international health, world health, nurse faculty, nurse educator, nursing education, service-learning, self-serving, nursing volunteerism, nurse volunteer, nurse, global health objectives, technology, sustainable change, brain drain, global expectations

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Introduction

Background and Significance

Current evidence supports that global health outcomes are directly related to resource availability within a given country. Resource availability varies among different countries, with developing, low-income countries generally experiencing a higher degree of scarcity. The World Bank estimates that 1.4 billion people live on less than \$1.25 a day, indicating that the vast majority of humanity is living in poverty (Tuck, 2008). According to United Nations International Children's Emergency Fund, approximately 11 million children die each year as a direct result of poverty ("Cancer in Developing Countries," n.d.). This staggering mortality rate is due in large part to a lack of resources such as clean water and adequate sanitation as well as limited healthcare access. Additionally, a statistic presented by the World Health Organization (WHO) in 2015 depicts that 52% of deaths in low-income countries can be attributed to nutritional deficiencies, maternal causes, conditions arising during pregnancy and childbirth, and communicable diseases, especially lower respiratory infections (The Top 10 Causes of Death, 2017). The summary of this data demonstrates the detrimental effects of healthcare inequality based on socioeconomic status.

As mortality rates remain high in low-income countries, there is a growing demand for nurse volunteers across international borders. Contemporary nursing encourages us to be socially responsible in caring about global health outcomes (Shaffer, Davis, To Dutka, & Richardson, 2014). The most common way that these types of services are achieved is through short-term projects that are designed to provide care for the immediate needs of individuals or groups of

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people. Some examples of short-term projects include assisting families in disaster relief, providing health screenings to the public, and distributing resources during emergency situations. The goal of providing educational services is to promote a change in beliefs and behaviors regarding a particular health issue to improve the health outcomes of a target population. Some examples of health-promoting services may include education about safe water, awareness events such as Breast Cancer walks, and HIV education and support services. Through participation in global volunteerism, nurses will have a significant impact on the mortality rate reduction among low-income populations.

Aside from promoting health and wellness in underserved communities, involvement in global health holds significant benefits for nurses by stimulating professional growth. A specific area of the nursing profession that is heavily enriched through international volunteer opportunities is that of cultural competency. A literature review conducted by Kokko (2011) identified three themes relating to the process of improving cultural competence among student nurses who participated in study abroad programs. These themes are an increased knowledge base of various cultures, personal growth, and the lasting impact of studying abroad on each student's nursing practice. As the demand for cultural competence in nurses continues to increase, students turn to study abroad programs in order to achieve invaluable clinical experiences that increase competency in basic nursing skills, develop a strong sense of self-awareness within the profession, exhibit social awareness, and appeal to future employers (Kent-Wilkinson, Leurer, Luimes, Ferguson, & Murray, 2015).

Service learning currently exists as an essential part of nursing education in the United States. A majority of service learning, however, focuses on the nurse's role in health promotion

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within the immediate community setting. While health promotion at any level is a hallmark of the nursing profession, increased opportunities for student nurses to practice this on a global scale will enrich nursing practice within the United States while simultaneously aiding in the equalization of health care delivery among nations of different socioeconomic statuses (Shaffer, Davis, To Dutka, & Richardson, 2014).

Global Health

Changes in demographics, epidemiological shifts, and redistribution of the disability burden have all contributed to a global shortage of healthcare professionals in recent years (Crisp & Chen, 2014). A descriptive analysis of recent population trends of skilled health professionals (SHPs: physicians, nurses, midwives) revealed that countries most affected by this shortage are those with highest rates of morbidity and mortality. This study examined data from 74 countries under the “Countdown to 2015” global health initiative, which established several Millennium Development Goals (MDGs) that have since been replaced by Sustainable Development Goals (SDGs) (Pozo-Martin, et al., 2017). The purpose of SDGs is to outline objectives for increasing global sustainability by 2030. This study aimed to identify the potential for success of participating countries in meeting the ‘Countdown to 2030 for Reproductive Maternal, Newborn, Child, and Adolescent Health’ SDG initiative. It drew associations between maternal and pediatrics health outcomes with the population density of available SHPs per 10,000 people (Pozo-Martin, et al., 2017).

One of the most influential factors to the pronounced effects on and disparities among human healthcare resources in various countries is workforce out-migration of nurses from developing countries. Known as “brain drain” this phenomenon is characterized by the loss of

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educated health workers and human resources from an area. Much of the literature regarding this phenomenon is focused on nurses' perceptions of brain drain. Data analysis of trends in the nursing workforce in Kenya from 1999-2007 shows that for every four nurses brought into the Kenyan workforce, one nurse applied for out-migration. Of the nurses who applied to out-migrate during this time, 85% were holders of a Bachelor of Science in Nursing. This represented 20% of all BSN holders in Kenya, posing significant difficulties for Kenya's healthcare system in maintaining their workforce of highly trained nurses (Gross, et al., 2011). Qualitative data collected from focus groups and personal interviews with 30 Sub-Saharan African nurses regarding reasoning behind out-migration to the United Kingdom. Five themes that were developed from this data were poor compensation for work, desire for professional development, poor healthcare/healthcare systems in home countries, similarities in language and education, and availability of visas and employment (Dimaya, McEwen, Curry, & Bradley, 2014).

Problem Statement.

The United States is currently behind other developed countries in endeavors to promote global health education among nursing students. Despite this, the push for adopting global health perspectives in nursing are continually increasing with newly introduced technology. There is a knowledge deficit regarding the comprehensive benefits of global health education for nurses, which would be essential to implementing more global health nursing education programs in order to meet the demand for nurses with this type of perspective and experience.

Statement of Purpose

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The purpose of this integrated literature review was to understand how the role of nurses volunteering in resource-limited countries impact global health, to identify significant benefits of the involvement of global health for nurses, and to explore nursing educators' global health experiences. The findings of and this study may be used to suggest ways in which further global health initiatives by serving as a foundation for exploring future educational programs.

Research Questions

1. How does the role of volunteer nurses in resource-limited countries influence the adaptive modes identified in Callista Roy's Adaptation Model to promote global health?
2. What are significant benefits of global health engagement for nurses that can be used to promote global health nursing programs in the United States?
3. What are the benefits of international service-learning for nurse educators in the United States?

Conceptual Model/Theoretical Approach

The Adaptation Model introduced by Sr. Callista Roy will guide to explain how global volunteerism in nursing impacts the ability of both underserved populations and volunteer nurses to adapt to changing trends in health care and administration (Roy, 1984). Regarding underserved populations abroad, this adaptation focuses on the ability of these peoples to adapt to changing disease patterns with limited access to resources. For volunteer nurses, this adaptation refers to the ability to adapt to expanding global health initiatives that are currently taking place in nursing. The Adaptation Model describes the nature of nursing as a vital community service and was first developed as the basis for an integrated nursing curriculum.

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According to Roy, the goal of nursing is to promote adaptation, which occurs when individuals respond positively to changes in their environment.

The major concepts that are defined in Roy's model are that of person, environment, nursing, health, and adaptation. The concept of person is defined as a group of individuals in constant interaction with the environment (Wills & McEwen, 2002). This concept can be applied to both the volunteer nurses in this study, as well as underserved subsets of the global population that are the focus of volunteerism in nursing. The concept of environment is characterized by conditions, circumstances, and influences that interact to alter human development and behaviors. The environment consists of different types of stimuli. Focal stimuli directly impact the human system and require a great amount of attention. Focal stimuli that is being investigated in this research includes the physical environment and educational resource availability, both of which are reflective of the economic state. The economy is an example of contextual stimuli, which is present with and contributes to the overall effects of focal stimuli (Petiprin, 2016).

In this model, health is viewed as being on a continuum. This means that both health and illness can coexist, but health predominates when the person is able to adapt appropriately to the environment. The role of the nurse in this context is to promote health by helping to facilitate adaptation in each of four adaptive modes. Nursing volunteers promote global health and adaptation in low-resource environments by promoting a sense of global unity (Self-Concept Group Identity Mode) and assisting individuals in adopting new societal roles by introducing health education programs in underserved areas (Role Function Mode). Conversely, volunteerism allows nurses opportunities to adapt to a given environment through these adaptive modes. Through volunteer opportunities abroad, nurses promote a sense of unity within

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themselves and become accustomed to their roles as volunteer educators/caregivers to unfamiliar populations. These modes of adaptation, how they are impacted by volunteer nursing, and their potential as bases for a global health component in undergraduate/graduate nursing curricula will all be further explored in this study.

Methods

Design

An integrative literature review was used to explore what types of studies have already been completed in global health nursing amongst our key study population of nurse educators. This literature review allowed us to gain a better understanding of the global health perspectives of nurse educators based on their experiences in recruiting nurse volunteers to provide health services in underdeveloped countries that have already been documented in other studies. This literature review further allows us to identify future recommendations for global health nursing initiatives and serve as evidence that global service learning is beneficial to and should be integrated in future nursing curricula. This comparative data analysis along with the adaptation model was used to formulate the questions included in the survey provided in the appendix, which can later be used for further research.

Literature Search Strategies

The databases searched to support our research questions include MEDLINE, CINAHL, PubMed, and Worldcat.org. These databases contain a sufficient number of articles that pertain to our research and allow us to answer our research questions thoroughly. The keywords used in our search include: global health, international health, world health, nurse faculty, nurse educator, nursing education, service-learning, self-serving, nursing volunteerism, nurse volunteer, nurse, global health objectives, technology, sustainable change, brain drain, and global

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expectations. When searching these keywords in the databases, we will make slight alterations to the keywords, such as using the stem “nurs-” to broaden our search to nurse, nurses, nursing, etc. We will use the “and” feature to include all keywords in that particular search to facilitate our research.

Literature Search Limitations and Inclusion/Exclusion Criteria

Eligibility criteria included only scholarly, peer-review articles within the last ten years, from 2007-2017. All of the articles that are cited throughout our paper are written in the English language. A majority of the articles that will be used to support our research are found in professional nursing journals.

Data Synthesis and Analysis

The purpose of our integrative literature review was to outline the benefits that are gained by the underserved countries, nursing volunteers, and nurse educators from international service learning and present this data in clear and concise fashion. A table summarizing all of the relevant, common benefits among each group can be found in our results section. This matrix allows us to compare and analyze the data in an effective manner to draw conclusions and propose suggestions for further research.

Results

The results of this integrative literature review introduced the available body of literature detailing current shifts in global health trends and how they relate to and can be used to benefit nursing education.

Benefits- Global Health Initiatives

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Some debate exists as to whether or not volunteerism in the form of service-learning actually contributes to sustainable benefits for resource-poor countries. Criticisms of service-learning include that it is ultimately self-serving, raises unmet expectations, is not culturally relevant for the host country, and provides a temporary fix to deeply rooted problems in the global healthcare delivery system (Suchdev et al., 2007). A 2016 analysis of survey data from approximately 500 Sigma Theta Tau International (STTI) chapters, however, yielded results to combat these criticisms. According to this data, several Millennium Development Goals are viewed as having been met through international service-learning opportunities. The MDGs referred to include: Eradication of hunger and poverty; reduction in child mortality; promotion of gender equality; promotion of maternal health; counter infectious diseases; and ensure environmental sustainability. Other benefits of international service-learning noted in this article include participation in global disaster relief, help with overcoming ethical barriers to healthcare (poverty, lack of access to care), and Creation of sustainable global partnerships (Dalmida, Amerson, Foster, McWhinney-Delhaney, Magowe, Nicholas, Pehrson, & Leffers, 2016).

A study published in 2015 suggests that volunteer physicians and nurses successfully helped build sustainable partnerships in Ghana by helping to train emergency medical personnel. This endeavor, called the Project Health Opportunities for People Everywhere (HOPE)-Ghana Emergency Medicine Collaborative (GEMC) Partnership, utilized a total of ten nurses and eight physicians to begin short-term volunteer work at Komfo Anokye Teaching Hospital. The volunteers were found to have a lasting impact that overall alleviated the effects of brain drain on this rural community, thereby permanently improving the provision of emergency nursing services by implementing a one-year long emergency nursing diploma program (Rominski et al.,

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2015). Another study in 2015 found that a short-term medical mission in the Dominican Republic called Operation Walk Boston led to sustainable changes in its hospital culture since its implementation in 2008 (Bido et al., 2015). Among these changes include greater collaboration between the nursing and medical teams, patient safety and improvement in care quality, greater independence among nurses; and a push for more faculty staffing and higher education among Dominican nurses.

Table 1: Influence of volunteer nurses in resource-limited countries on adaptive modes identified in Callista Roy’s Adaptation Model to promote global health

Dalmida, et al., 2016	Rominski, Yakubu, Oteng, Peterson, Tagoe, & Bell, 2015	Bido, et al., 2015
<ul style="list-style-type: none"> ● Global disaster relief ● Overcome ethical/financial barriers to healthcare ● Creation of sustainable global partnerships ● Eradication of hunger and poverty (MDG 1) ● Reduction in child mortality (MDG 4) ● Promotion of gender equality (MDG 3) ● Promotion of maternal health (MDG 5) ● Counter infectious diseases (MDG 6) ● Ensure environmental sustainability (MDG 7) 	<ul style="list-style-type: none"> ● Alleviation of “brain drain” ● Overcome ethical/financial barriers to healthcare ● Faculty staffing 	<ul style="list-style-type: none"> ● Greater nurse/doctor collaboration ● Patient safety and quality improvement ● Greater independence among nurses ● Faculty staffing ● Creation of sustainable global partnerships

Benefits- Nursing Students

The current focus of nursing educational programs in the United States is still largely based on community health; yet the literature reflects that increased attention is being given to global health implications even in the community setting. In a 2013 study published in *Public*

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Health Nursing describes how a community health course for nurses was redesigned to increase students' sense of global engagement through interaction with local immigrant populations (Riner, 2013). The study of the redesigned practicum consisted of pre-experience, onsite, and post-experience phases. Practicum planning and development was carried out during the pre-experience phase (Riner, 2013).

The onsite phase consisted of student learning and engagement with immigrant populations through various agencies in their communities. Students submitted weekly journals during the onsite phase, and participated in a group debriefing session and formal evaluation of the course in the post-experience phase. The results of this study found that increases in global health knowledge and perspectives took place when students were engaged with the local immigrant populations in their own communities and able to reflect on these experiences. The study concluded that through the development of a multicultural perspective in health care, students experienced both increased feelings of self-efficacy and cultural competence (Riner, 2013).

While community health is a topic frequently seen in nursing education, recent trends in nursing education display an increasing focus on global health perspectives in nursing curricula. Clark, Raffray, Hendricks, and Gagnon (2016) performed an integrative literature review and recommended fourteen combined global and public/community health competencies that can be used to guide the transition to a global health perspective in education. The fourteen competencies identified are cultural competency; communication; social justice; environment; ethics and professionalism; travel and migration; key players; research; determinants of health; health systems/delivery; disease burden and epidemiology; health

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promotion and illness prevention; assessment and management skills; and collaborative partnerships (Clark et al., 2016).

Studies regarding the benefits of international service-learning largely focus on qualitative data collection regarding nursing students' perception of their own service-learning experiences. A recent longitudinal study used survey data to identify the various perceived benefits that influence the decisions of students to study abroad. According to the data gathered from 1058 undergraduate and graduate nursing students during the 2013-2014 academic year, the benefits that students expected to gain from international learning experiences closely related to the competencies outlined by Clark et al. (2016). These benefits included international nursing experience, self-awareness/independence in nursing practice, increased employment opportunities, increased clinical skills competencies, participation in international research/clinical opportunities, social responsibility demonstration, and foreign language acquisition (Kent-Wilkinson, Leurer, Luimes, Ferguson, & Murray, 2015).

A combined qualitative-quantitative study of the effects of a short-term international service-learning trip on self-efficacy, self-confidence, nursing skills, and self-awareness in ADN students working with culturally diverse patient groups. The study compared a group of 17 students who participated in a 2-week long service-learning trip in Belize to a control group of 17 students who participated in a 2-week long clinical immersion at a local hospital. All participants attended the same nursing program. The Cultural Self-Efficacy Scale was used to quantitatively analyze differences in self-efficacy measures of knowledge and confidence when working with diverse patient groups. Comparisons were made between pre- and post-intervention measurements within the control and intervention groups. A matched-pair t-test

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showed that, while no significant difference was present within the control group, there was a significant improvement in self-efficacy for the intervention group ($p < 0.05$). Qualitative data was collected through self-reflection journals. Themes of the reflections from the control group were limited to the efforts to address the needs of culturally diverse patients. Themes found in the reflections of the intervention group (e.g. culture shock, gratitude, increased awareness of poverty) indicated that these students experienced more personal growth compared with the control group. The reflections of the intervention group alluded to an increased sense of cultural self-awareness within these students (Long, 2014).

Table 2: Benefits of global health engagement for nursing students to promote global health nursing programs in the United States

Riner, 2013	Clark, Raffray, Hendricks, & Gagnon, 2016	Kent-Wilkinson et al., 2015	Long, 2014
<ul style="list-style-type: none"> ● Self-efficacy ● Cultural competency 	<ul style="list-style-type: none"> ● Cultural competency ● Foreign language acquisition/improved communication ● Social responsibility ● Knowledge of disparities in health systems/delivery ● Epidemiological knowledge ● Understanding of health determinants ● Participation in international research ● Health promotion/illness prevention ● Assessment and management skills ● Collaboration 	<ul style="list-style-type: none"> ● International clinical opportunities ● Self-efficacy ● Greater employment opportunities ● Improved clinical skills competencies ● Participation in international research ● Social responsibility ● Foreign language acquisition/improved communication 	<ul style="list-style-type: none"> ● Self-efficacy ● Cultural competency

Benefits- Nurse Educators

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In an article written by Shishani et al., (2012) that advocates for global health training to be integrated in traditional nursing curricula, the researchers state that nurses represent the largest number of healthcare workers worldwide, yet they are currently underutilized for global health practices. This study revealed that the lack of global health nursing education as well as global migration and disincentives have contributed to the global nursing shortage, especially among the key population of nurse educators (Shishani et al., 2012). A nursing Supercourse is currently being proposed to provide educational material on public health topics such as non-communicable disease prevention (NCD), chronic diseases, disaster preparedness, and environmental health (Shishani et al., 2012). The goal of this course is to improve global health training among nurse educators and volunteers who provide their services internationally to address the major health gaps that currently exist in many underserved countries. This Supercourse will be developed by expert nurse educators and researchers to share its well-structured contents among nursing programs worldwide and will help build a strong, knowledgeable force of global health leaders in nursing (Shishani et. al, 2012).

According to a study by Holland & Magama (2017), “one of the challenges nurses face in under-resourced countries is the ability to collaborate with nurses who have access to professional development, evidence- based practice, and nursing education resources.” Therefore, formulating sustainable partnerships is equally important in achieving positive global health outcomes as this leads to continued growth and sustainability of service-based global nursing education programs (Spies, Garner, Prater, Riley, 2015). Additionally, sustainable global partnerships help to develop well-prepared, global health leaders within the nursing profession while also easing the global shortage of nursing faculty (Spies et al., 2015).

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Table 3: Benefits of international service-learning for nurse educators in the United States.

Shishani et al., 2012	Holland & Magama, 2017	Spies et al., 2015
<ul style="list-style-type: none"> ● Preparedness to exchange expertise and knowledge worldwide ● Improved education on public health topics such as non-communicable disease prevention (NCD), chronic diseases, disaster preparedness, environmental health ● Formulate sustainable global partnerships ● Create a global health training tool for nurses, such as the Nursing Supercourse that benefits nurse educators, nurse volunteers, and underserved countries worldwide ● Be on the frontier of global health education and health promotion ● Help ease the global shortage of nursing faculty 	<ul style="list-style-type: none"> ● Improved education on public health topics such as non-communicable disease prevention (NCD), chronic diseases, disaster preparedness, environmental health ● Development of practical clinical strategies to improve health outcomes ● Help ease the global shortage of nursing faculty 	<ul style="list-style-type: none"> ● Formulate sustainable global partnerships ● Address the nursing research gap ● Help ease the global shortage of nursing faculty ● Develop global leaders and build international health workforce capacity ● Be on the frontier of global health education and health promotion

Synthesis

Tables 1-3 reflect the results from this integrative literature review that answer the following research questions: 1) How does the role of volunteer nurses in resource-limited

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countries influence the adaptive modes identified in Callista Roy’s Adaptation Model to promote global health? 2) What are significant benefits of global health engagement for nurses that can be used to promote global health nursing programs in the United States? 3) What are the benefits of international service-learning for nursing educators in the United States? Table 4 represents the common findings among all of the literature reviewed in this study.

Overall, the main benefits of nursing volunteerism for resource-poor countries identified in the literature include faculty staffing, creation of sustainable global partnerships, and overcoming financial/ethical barriers to healthcare delivery in rural areas. The main benefits of global service-learning for nursing students identified in this literature review are self-efficacy, cultural competency, participation in international research, social responsibility, and foreign language acquisition/improved communication. Students report becoming more confident in their skills as nurses in a society with an increased push to focus on overcoming cultural barriers to improve healthcare on a global plane. The main benefits of global health engagement for nurse educators concluded in the literature review are improved education and increased ability to share knowledge and expertise on public health topics such as non-communicable disease prevention (NCD), chronic diseases, disaster preparedness, and environmental health. Additionally, nurse educators benefit from international service learning by becoming leaders on the frontier of global health education and promotion, assisting in easing the global shortage of nursing faculty, formulating sustainable global partnerships.

Table 4: Synthesis of the common findings listed in Tables 1-3

Influence of volunteer nurses in resource-limited countries on adaptive modes identified in	Benefits of global health engagement for nursing students to promote global health nursing programs in the United States	Benefits of international service-learning for nurse educators in the United States
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<p>Callista Roy's Adaptation Model to promote global health</p>		
<ul style="list-style-type: none"> ● Faculty staffing ● Creation of sustainable global partnerships ● Overcome ethical/financial barriers to healthcare 	<ul style="list-style-type: none"> ● Self-efficacy ● Cultural competency ● Participation in international research ● Social responsibility ● Foreign language acquisition/improved communication 	<ul style="list-style-type: none"> ● Improved education on public health topics such as non-communicable disease prevention (NCD), chronic diseases, disaster preparedness, and environmental health ● Help ease the global shortage of nursing faculty ● Be on the frontier of global health education and health promotion ● Formulate sustainable global partnerships

Conclusion

With continuous technological advancements and a worldwide push for initiatives such as the Sustainable Development Goals, global health is quickly becoming of increasing concern to the healthcare community. Despite this, international service-learning compared to community-based service learning is underrepresented among nursing education programs in the United States. The qualitative data comparison among several article findings described in this literature review reveals that there is adequate evidence in the literature that supports the assertion that international service learning is perceived as beneficial to resource-poor countries. There is also sufficient evidence to support the assertion that both nursing students and educators perceive exposure to global health through international service-learning as beneficial to professional development as nurses in today's society.

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Despite the availability of literature that focuses on benefits of international service-learning education for both resource-poor countries and nursing students, there is a knowledge gap that regarding the impact of such experiences on nursing faculty. Future implications of this study aim to add to the current body of literature about global health education by addressing the unique perspectives of faculty on the benefits of service-learning in developing a global perspective in nursing education.

Table 4 represents the basis of a potential survey that could be used in future research studies to add to this body of knowledge, especially regarding the final research question of how nurse educators who have previously volunteered abroad perceive the current need for integration of global health volunteer opportunities and programs into nursing curricula throughout the United States. The questions for this survey, designed to be completed by nurse educators, were developed in accordance with the research questions posed in this paper as well as Callista Roy's Adaptation Model. A copy of this suggested survey for future research is found in Appendix A. The additional research question to guide further research that was formulated during the construction of this survey is: How do nurse educators who have previously volunteered abroad perceive the current need for integration of global health volunteer opportunities and programs into nursing curricula throughout the United States? This question was proposed to replace the final research question investigated in this literature review.

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Table 5: Survey formulation to answer the following proposed future research question: How do nurse educators who have previously volunteered abroad perceive the current need for integration of global health volunteer opportunities and programs into nursing curricula throughout the United States?

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<p style="text-align: center;">Purpose</p> <p>To explore nursing educators' global health experiences, to understand how the role of nurses volunteering in resource-limited countries impact global health, identify significant benefits of the involvement of global health for nurses, and to identify perception of integrating global health nursing opportunity in to nursing curriculum. The findings of this study may be used to further global health initiatives by serving as the foundation for future educational programs.</p>	<p style="text-align: center;">Research Questions</p> <ul style="list-style-type: none"> • How does the role of volunteer nurses in resource-limited countries influence the adaptive modes identified in Callista Roy's Adaptation Model to promote global health? • What are significant benefits of global health engagement for nurses to promote global health nursing programs in the United States? • How do nurse educators who have previously volunteered abroad perceive the current need for integration of global health volunteer opportunities and programs into nursing curricula throughout the United States? 	<p style="text-align: center;">Conceptual Framework</p> <p>The Adaptation Model introduced by Sr. Callista Roy will guide to explain how global volunteerism in nursing impacts the ability of both underserved populations and volunteer nurses to adapt to changing trends in health care and administration</p>	<p style="text-align: center;">Interview Questions</p> <ol style="list-style-type: none"> 1. Briefly describe the type of volunteer work that you did, including location and populations served. 2. What were the major health problems/inequalities you witnessed while volunteering? 3. What were the major resources your volunteer group(s) were able to provide to underserved communities? 4. How do you feel your experience influenced these key issues within these international patient populations? 5. In retrospect, what would you have changed regarding your experience in order to increase your influence on these nations? 6. What nursing competencies do you believe can be strengthened through service-learning? 7. How are the competencies mentioned above uniquely strengthened through global volunteerism? 8. What professionalism competencies do you believe are uniquely strengthened through international service-learning? 9. How do the competencies mentioned in the above answer influence your work as a nurse educator? 10. Do you believe that the United States places adequate emphasis on global health promotion in nursing education? If not, how do you suggest integrating this topic into nursing curricula? 11. What are some barriers you've identified to promoting international service-learning within nursing programs? 12. What were you exposed to in your volunteer experience that you felt was integral to your nursing career, yet lacking in your traditional nursing education? 13. What factors do you believe have a significant impact on the current call for global health education in nursing? 14. How would you describe the impact of your service-learning experience on the
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			<p>adaptive abilities of the populations that were served and on that of students/faculty in the face of a shifting global health agenda?</p> <p>15. In your own words, please summarize the perceived need for international service-learning in nursing education programs.</p>
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Appendix A

Survey Questions

Demographics

Age:

Gender:

Highest level of education completed:

Number of years as a practicing RN:

Number of years as a nurse educator:

Duration of volunteer experiences abroad:

1. Briefly describe the type of volunteer work that you did, including location and populations served.
2. What were the major health problems/inequalities you witnessed while volunteering?
3. What were the major resources your volunteer group(s) were able to provide to underserved communities?
4. How do you feel your experience influenced these key issues within these international patient populations?
5. In retrospect, what would you have changed regarding your experience in order to increase your influence on these nations?
6. What nursing competencies do you believe can be strengthened through service-learning?
7. How are the competencies mentioned above uniquely strengthened through global volunteerism?
8. What professionalism competencies do you believe are uniquely strengthened through international service-learning?
9. How do the competencies mentioned in the above answer influence your work as a nurse educator?
10. Do you believe that the United States places adequate emphasis on global health promotion in nursing education? If not, how do you suggest integrating this topic into nursing curricula?
11. What are some barriers you've identified to promoting international service-learning within nursing programs?

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12. What were you exposed to in your volunteer experience that you felt was integral to your nursing career, yet lacking in your traditional nursing education?

13. What factors do you believe have a significant impact on the current call for global health education in nursing?

14. How would you describe the impact of your service-learning experience on the adaptive abilities of the populations that were served and on that of students/faculty in the face of a shifting global health agenda?

15. In your own words, please summarize the perceived need for international service-learning in nursing education programs.