AN EXAMINATION OF NURSING’S CONTRIBUTION TO GLOBAL HEALTH

by

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Abstract

Nurses provide the vast majority of front-line global healthcare, but little is known about the contribution that nursing has made to global population health. Study abroad programs have become a popular venue for engaging nursing students in global health initiatives. Yet, many programs lack reliable tools and evaluation methods to measure the contribution of nursing. Global health is one of the four priorities for the future of nursing science (Eckhardt et al., 2017). The purpose of this study was to examine the contribution of nursing to global health.

A qualitative descriptive study was conducted with five nursing students who completed a 2017 study abroad program, in either Guatemala or Nicaragua. In-person interviews were conducted, audio-taped and transcribed. Content analysis was used to look for commonalities and differences within and between cases. Three themes were identified: Seeking Sustainability, Practicing Advocacy, and Engaging in Informed Practice. *Seeking Sustainability* described efforts by participants to build community partnerships which empowered communities to continue the health promotion efforts. *Practicing Advocacy* defined how participants used the knowledge and experience they gained to improve care for host country nationals and Latino patients in the US. *Engaging in Informed Practice* involved applying principles of safety, quality, and ethical behavior to clinical practice abroad. The only outcome-specific program identified by participants was the water filter study in Guatemala. Most participants could not name a measurement or evaluation tool used during their program. This suggests a need for further research, since evaluation of nursing initiatives’ contributions to global health helps fulfill the United Nation 2030 Sustainability Development Goals.
An Examination of Nursing’s Contribution to Global Health

Introduction

The concept of helping vulnerable populations is not new for nurses. One of the guiding principles of nursing is to “[collaborate] with other health professionals and the public to protect human rights, promote health diplomacy, and reduce health disparities” (American Nurses Association [ANA], 2015, p. 8). To fulfill this principle, nurses should work within the parameters of the United Nations Sustainability Development Goals (United Nations, 2018; World Health Organization, 2017). One way in which nurses can achieve this is through global health initiatives in low- and middle-income countries (LMICs). International study abroad programs are popular venues for nursing students to learn about a culture and augment health care resources in LMICs.

Nurses provide over half of front-line healthcare globally (All-Party Parliamentary Group on Global Health, 2016), yet in a recent integrative review on short-term international efforts, only 14% of the studies identified a nursing role (Dawson, Elliott, & Jackson, 2017). These nurse researchers identified a need for evaluation of nursing’s contribution to global population health (Dawson et al., 2017). In general, there is a lack of standardized tools or evaluation methods for global health initiatives (Sykes, 2014). In a systematic literature review, almost all of the studies produced low-level outcome data, focused on physician-led outreach initiatives, and reported minimal information about nursing (Sykes, 2014).

An equally critical concern regarding some study abroad programs is the lack of ethical standards. One investigator reported that the global health efforts of US clinicians, including students, working in Guatemala, had good intentions yet may have resulted in adverse outcomes (Berry, 2014). For example, students working outside their scope of practice delivered an
incorrect medication to a community member (Berry, 2014). Other investigators noted a similar situation where pre-health students performed outside their scope of practice in an African clinic to gain experience (Evert, Todd, & Zitec, 2015). Ethical issues are not new to global health initiatives and numerous investigators have provided models for ethical and global sustainability (DeCamp, 2007; Hunt, Schwartz, Sinding, & Elit, 2014; Leffers & Mitchell, 2011; Suchdev et al., 2007).

Global health efforts have become increasingly visible with the rise of technology and media. This increased visibility provides an opportunity to critically consider global health efforts. The purpose of this study is to examine nursing’s contribution to global population health in two low-income countries.

**Review of the Literature**

A literature review was performed using the PubMed and PsycINFO databases searched primarily between 2012 and 2018. Search terms used were: “nurses/ing”, “global health”, “humanitarian”, “international”, “outreach”, “short-term”, “outcomes”, “sustainability”, and “partnership.” Seminal articles relevant to the topic were also included. This literature review is organized into the following categories: evaluation issues, partnership development, and cultural competency.

**Evaluation issues**

Nurses have a responsibility to help global communities meet the United Nations Sustainable Development Goals, which outline key priorities for global health (Opollo et al., 2012). However, key problems exist related to evaluation and nursing’s contribution to global health (Dawson et al., 2017). The first was that few studies specified the role of the nurse; those that did were limited to clinical areas such as midwifery or cardiovascular care, physical
assessment, participation in surgical teams, and primary health care (Dawson et al., 2017). The second problem was a perceived notion of global health that did not match reality, meaning that participants sometimes expected to altruistically rescue communities in need and were disappointed when there was no obvious change immediately following their efforts (Dawson et al., 2017). Other problems were unclear partnership development strategies and ethical practices in global health settings (Dawson et al., 2017).

Nursing researchers discussed nurses’ role of advocacy as world citizens who promote social justice and seek to understand others’ points of view (Crigger, Brannigan, & Baird, 2006). Nurses in global health settings may have a responsibility to contribute to global health as advocates; however, advocacy has been difficult to measure. Another nurse researcher stressed the importance of public health competencies in global health settings (Brown, 2017). Public health competencies include health education, conducting community service projects, and offering health screenings. While these efforts are well-intentioned, no data was collected on these interventions.

Nurses in global health settings are also involved in nursing education efforts. Investigators described how US nursing faculty filled roles in Cambodia to address the shortage of nursing faculty and lack of continuing education (Lasater, Upvall, Nielsen, Prak, & Ptachcinski, 2012). This study supported the “train the trainer approach” on the part of nursing faculty (p. 65) but did not collect any data by which to evaluate outcomes. In another study, based on data from 23 Dominican and Haitian partners, investigators recommended provision of educational training to local nurses, nurse educators, and community members to advance nursing practice (Underwood, Gleeson, Konnert, Wong, & Valerio, 2016). Again, outcome data was not collected.
Partnership Development

The development of partnerships between US healthcare professionals and host country organizations offers strength to global health efforts. One qualitative study encouraged US nurses to focus on building strong partnerships with their international counterparts (Ryan-Krause, 2016). Based on a nine-year global health partnership between a US nursing school and communities in Central America and the Caribbean, investigators found that the US students gained language, cultural, and clinical skills, but outcomes of partnership development were not addressed (Ryan-Krause, 2016). In a systematic review on international nursing partnerships, investigators found that few of these partnerships took steps to create equitable partnerships between US nursing programs and host organizations (George & Meadows-Oliver, 2013).

Nursing education was the focus of another study with a five-year partnership between a Nicaraguan and a US nursing school (Lake et al., 2017). This partnership resulted in curriculum improvements and provision of resources for simulation labs, but the effect of partnership development on population health remains unknown (Lake et al., 2017). Another nursing investigator described how a servant leadership approach may help to establish culturally competent relationships with international communities (Johanson, 2017). However, these relationships did not evaluate nursing’s contribution to global health.

In another global health partnership, nursing students and faculty distributed tabletop water filtration systems to members of a rural Mayan community in Guatemala. Based on an eight-year partnership between a US school of nursing and a Guatemalan host organization, a Mayan village (71 families) was supplied with a safe drinking water source through the distribution of table-top water filtration systems (Larson, Hansen, Ritz, & Carreño, 2017). One year post-intervention, there was a clinically significant reduction in the prevalence of diarrheal
disease in this community. Although these partnerships described nursing’s contribution on a small scale, the contribution to population health is uncertain.

**Cultural Competency**

Initial outcomes of study abroad programs have been focused on the development of cultural competency among nursing students (Ryan-Krause, 2016). Cultural competence is a required component of baccalaureate nursing education (American Association of Colleges of Nursing, 2008). Several investigators discussed pre-experience cultural education for nursing students prior to participation in global health outreach programs (Larson, Ott, & Miles, 2010; Spies, 2016; Underwood et al., 2016). For example, investigators described a study abroad program’s pre- and post-experience seminars, which involved 28 hours of education and discussion on political, economic, social, and health components (Larson et al., 2010). While the practice of cultural education is supported in the current literature, it is unclear if and how this practice represents a contribution of nursing to global health.

Several investigators discussed the importance of cultural competency in promoting effectiveness and efficiency in global health efforts. An interdisciplinary group of researchers found that many volunteer participants in numerous developing countries felt they lacked sufficient skill in cultural competency (Chiu, Weng, Chen, Yang, & Lee, 2014). A nursing researcher described a global health program with advance practice registered nurse (APRN) students in Africa, emphasizing the importance of cultural competency (Spies, 2016). Pairing APRN students with local providers to care for patients fostered cultural competency, and it also helped to build sustainability (Spies, 2016). A group of nursing researchers found that international clinical placements increased nursing students’ understanding of foreign cultures and desire to continue discussing international health issues (Gower, Duggan, Dantas, & Boldy,
Participants in this study reported that they gained experience working with culturally diverse teams and settings. While these studies proposed that cultural competency facilitated efficiency in global health efforts, they did not discuss outcomes on the health of global communities.

This literature review suggests that the role of the nurse in global health is vague, international partnership development is not well-referenced as a nursing outcome, and cultural competency has not been linked sufficiently to nursing’s contribution of nursing in global health. This study sought to examine the contribution of nursing to global health based in two developing countries, Guatemala and Nicaragua.

**Methods**

A qualitative descriptive study was used to address a concern of clinical importance while remaining close to the data (Sandelowski, 2010). A nursing program in eastern North Carolina conducts two study abroad programs each year: one in Guatemala, and the other in Nicaragua. The Guatemala program focuses on global health from a public health perspective, and the Nicaragua program focuses on the delivery of primary care. The program in Guatemala is in its 10th year and the program in Nicaragua is in its ninth year. The faculty for both programs were supportive of this project and shared the email addresses of students who completed the program in 2017. The research question for this study was, “What are the contributions of nursing to population health in Guatemala and Nicaragua?” The study was approved by the university institutional review board.

**Sample**

Undergraduate and graduate nursing students who completed a study abroad program in 2017 were invited via email to participate in this study. Students were sent an informed consent
paragraph via email and consented to participate through a return email. Participant names remained anonymous from the faculty who led the programs. A convenience sample of five, out of a total of 12, students agreed to participate in the study. Participants ranged in age from 19 to 41 years and all were female. The students’ background led them to participate in the study abroad program. For example, participants either had prior experience in a developing country or a Spanish-speaking country, or they had an immediate family member who was born in a developing country.

Data Collection

Interviews were conducted with five nursing students over a three-month period between December 2017 and February 2018. Interviews ranged in length from 14 to 37 minutes at a private location selected by the participant. Interviews were audio recorded and transcribed verbatim to yield 36 single-spaced, typed pages. Transcripts were immediately de-identified. Demographic data collected included age in years and prior experience in global health. A semi-structured interview guide was used that included the following questions:

- Would you explain your decision for participating in this experience?
- What prepared you for this experience?
- Tell me about the key people, groups, or organizations that you worked with.
- For the key people, groups, or organizations that you worked with, describe the environment or setting(s) where you worked? (Probe: what did key people do?)
- With each of the key people or organizations, describe the outcome or end result your work had on the health of the population you served?
- How did you and/or the people you worked with determine the outcome or end result of your work on the health of the population you served?
The author has participated in several short-term experiences in Guatemala and Nicaragua, which brings both an understanding of global health issues and a biased perspective. This knowledge and bias required continual reflection during data analysis and interpretation, in order to foreground the participants’ perspective.

**Data Management and Analysis**

Transcripts were stored on an encrypted server in a locked office in the college of nursing. Data analysis was performed on coded transcripts. Initially, a word frequency count was performed on all transcripts to identify key words. For example, “teach”, “educate”, and “learn” was prevalent in the five transcripts. This information was used to guide future readings of transcripts. The classic analysis strategy was used by two readers of the transcripts (Krueger & Casey, 2015). Each transcript was line numbered and highlighted to identify specific quotes from the transcripts. Transcripts were read multiple times by two independent reviewers. The first time, a question-by-question matrix was constructed. The second time, transcripts were analyzed for similarities and differences. The third time, preliminary themes were determined. The fourth time, major themes were revised, and sub-themes with supporting quotes were created. The readers discussed themes and sub-themes throughout the analysis. Data was analyzed for frequency, specificity, emotion, and extensiveness (Krueger & Casey, 2015).

**Findings**

The three thematic representations identified were: *seeking sustainability*, *practicing advocacy*, and *engaging in informed practice*. Each thematic representation consisted of specific nursing interventions that are discussed here.
Seeking sustainability

Seeking sustainability included elements of health teaching and collaboration and involved both students and community members. Sustainability was sought by students and community members through informal health teachings, known as charlas, and indirectly through collaboration and cultural encounters. Although students and community members generally held one of two roles (educator or learner) in any specific context, learning was reciprocal when considered from the perspective of the program at large. Health teaching was pervasive and students noted specific topics such as nutrition, oral health, handwashing, and women’s health. According to one student,

Our trip was really based on educating everywhere we went, anybody we worked with, any chance we got, we tried to, you know, give them a tip or teach them something that in the long run would help, and I think that is very important when you look at the long-term impact of what you’re doing. (student 02 in Guatemala)

Seeking sustainability was also sought through collaboration. One participant remarked, “It’s not us and them, it’s we; we’re all together, umm, and I think that we can learn a lot from each other” (student 01 in Guatemala). Another participated stated,

My Spanish teacher of course was amazing. She wanted to help me learn Spanish as much as I could. She was also really interested in what we were doing, and she actually taught me a lot of history of Guatemala, and she took me on fieldtrips, umm, during school, and tried to, you know, show me around some places that she grew up. (student 02 in Guatemala)
Practicing advocacy

Practicing advocacy focused on health care access and delivery of care. Participants described how they would use what they learned and saw to impact their practice in the United States. One participant stated,

When you come back to the United States and you work as a nurse, you advocate for Latino patients, and you, you know, because you know where they came from, and you understand, you, you more so understand their perceptions of health and perceptions of healthcare and seeking healthcare and, you know, all that encompasses that, umm, so it kind of allows you to put yourself more in – more so in their shoes than someone who has not seen where they come from. (student 02 in Guatemala)

Another participant described how the understanding she gained during the study abroad program would enable her to better educate people and augmented her understanding of global health.

Engaging in Informed Practice

Engaging in informed practice included elements of health promotion and social support. Many students discussed their involvement in a clean water initiative to reduce diarrheal disease. One participant stated while describing a clinic outreach she participated in, “There was very few prescriptions for the anti-parasite medications which would be evidence that the water filters are, umm, hopefully improving people’s health in that community” (student 01 in Guatemala). A second participant noted, “We had water filters there to give it to them so that we could probably – hopefully prevent the – not just treat the parasite but prevent it from happening again” (student 03 in Guatemala). Women’s health promotion was described by a student in her work teaching
self-breast examinations. Health promotion seemed to empower community members to prevent disease.

Participants also described their work with malnourished and special needs children helping with activities of daily living, such as bathing, feeding, and playful stimulation activities. One participant stated,

You’ve got to get [the children] up, you’ve got to feed them, you’ve got to make sure they eat, you know, umm, and teaching them nutrition things. I think we saw big changes in not only the kids but the way that the moms interacted with their kids. (student 02 in Guatemala)

Social support was also an element of engaging in informed practice. One student stated that “We were more there, I feel like, for emotional support and to let these children be children” (student 04 in Guatemala). Another noted,

We really were just volunteering, and you know, taking some of the burden off the staff, but I mean, I think that, you know, we would probably love for someone to come in and help us, take a burden off of us, you know, we understand, so, umm, just giving them a day to recoup and not have to worry about doing everything. (student 02 in Guatemala)

These responses reflect how nursing contributions were most helpful in resource poor environments and demonstrated holistic nursing care. One student stated, “We had all the supplies, we brought our stethoscopes and our otoscopes and everything we needed, and we saw patients” (student 01 in Nicaragua).

Although all the students described what they believed were outcomes of population health, no students described how they measured nursing outcomes toward global population health.
Discussion

The findings of this qualitative descriptive study offer insight from students who participated in one of two short-term global health study abroad programs. The findings may contribute to an increased understanding of nursing’s contribution to global health.

Although the theme of Seeking sustainability is supported by the literature (DeCamp, 2007; Lake et al., 2017; Larson et al., 2017; Spies, 2016; Suchdev et al., 2007), the literature did not discuss whether achieving sustainability is an outcome of nursing efforts. Students who participated in health teaching considered their contribution as working toward or “seeking sustainability.” However, students in this study did not describe how sustainability was measured or evaluated, therefore evidence of these efforts is unavailable. Whether through informal educational sessions or the development of partnerships, nurses have a responsibility to ensure that the outcomes of their global health efforts do not end when the nurses return to their home countries.

To determine whether sustainability has been achieved, there must be a way to measure outcomes. Participants described several ways they felt they contributed to sustainability, but none of these efforts were measured, with one exception. This exception was the clean water project in which participants distributed water filters to Mayan families who lacked a source of clean drinking water and returned the following year to survey the health status of the families (Larson, Hansen, Ritz, & Carreño, 2017). The findings were clinically significant regarding population health.

The theme of Practicing advocacy is also supported by the literature (Brown, 2017; Crigger, Brannigan, & Baird, 2006). This study suggests that global health work empowers nurses to better advocate for their patients. By increasing their understanding of and experience
working with global communities, the students in this study improved their knowledge and ability to act as advocates for Latino patients in the United States. Advocacy was not measured; therefore, there is no evidence to support this contribution.

Within the theme of Engaging in informed Practice, health promotion was supported by the literature (Johanson, 2017; Larson, Hansen, Ritz, & Carreño, 2017). However, social support was not found in the literature. Social support is engrained in the profession of nursing. This may involve supporting patients when they are in crisis or in need of help (Pejner, Ziegert, & Kihlgren, 2015). In the context of this study, social support was provided to children, mothers, and healthcare staff. Social support may represent a unique contribution of nursing to global health. Social support was not measured.

This study expands the limited information about the contribution of nursing to global health, but emphasizes the importance of evaluation of outcomes in order to have evidence that nursing’s contribution has a real impact on population health.

**Implications for Research and Practice**

Further research is needed to identify measurement tools for outcomes of global health initiatives. Specifically, tools to measure impact of partnerships on population health. Additionally, in-depth narratives with community leaders may yield further insight into the contributions to global health. Study abroad nursing programs could benefit from becoming more outcome-oriented. Cultural competence gained by participation in short-term global health initiatives present opportunities for applying cultural knowledge and skills. In this way, nurses can improve health care delivery to immigrant clients in the US. Finally, nurses have a responsibility to engage in informed practice by applying principals of safety, quality, and placing community needs above personal desires for growth and experience.
References


Berry, N. S. (2014). Did we do good? NGOs, conflicts of interest and the evaluation of short-term medical missions in Sololá, Guatemala. *Social Science & Medicine, 120,* 344-351. doi:10.1016/j.socscimed.2014.05.006


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