

CLINICAL PRACTICE

The use of critical reflective inquiry among American Baccalaureate Nursing Students in a global service learning experience in Haiti: A qualitative study

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ABSTRACT

Background: Global service-learning (GSL) experiences are gaining increased recognition as essential nursing education components. Nursing students immersed in global communities contribute to society, through reciprocal partnerships, by improving health. GSL students should engage in reflection as a form of assessment, although there is limited empirical data on learning outcomes, and no universal model of reflection exists. The purpose of this study was to better understand the nature of practice events students chose to describe during a week-long GSL experience in Haiti, their reflective analysis, and ability to critique their experiences as a catalyst to change future practice.

Methods: In this qualitative descriptive study, critical reflective inquiry (CRI) through guided journaling was utilized for ten nursing students who traveled to Haiti for clinical immersion. Data was analyzed using a template approach in relation to study aims and phases of the model.

Results: CRI was a useful framework as students illuminated the progression of reflective thinking. Five categories in practice situations were delineated: a) ethical dilemmas, b) health promotion, c) professional role modeling and power of team, d) challenges in communicating and making a connection, and e) respect of the Haitian perspective. Students also articulated moral reckoning and ethical sensitivity skills not previously reported in relation to GSL experiences.

Conclusions: CRI could be considered a universal model of reflection for GSL experiences among nursing students. Use of focus groups in future studies may improve recall of student experiences as they often described same practice situations. It is difficult to determine if reflection can be maintained to transform practice, but long term impacts of GSL could be studied longitudinally. In contrast to current literature, students' description of moral reckoning and ethical sensitivity skills pose a challenge to nurse educators about how to further develop these essential skills post GSL immersion.

Key Words: Undergraduate nursing education, Critical reflection inquiry, Global service learning, Ethical sensitivity

1. INTRODUCTION

Service-learning is broadly defined as “a teaching and learning strategy that integrates meaningful community service through instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communi-

ties”;^[1] with reflection and reciprocity being key concepts.^[2] Global service-learning (GSL), as an experiential learning pedagogy, balances student and community needs and incorporates the use of reflective processes.^[3] It is directed toward student development related to global concerns through in-

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ternational immersion initiatives, or at home with aggregate populations representing a growing presence in the United States (U.S.).^[3]

At present GSL plays a significant role in nursing education worldwide.^[4] With increased diversity of the population in the U.S., health care institutions are pursuing nurses who possess knowledge and skills to provide culturally and linguistically competent care.^[5] Because of this, nursing students and the multicultural communities in which they live and attend school are challenging schools of nursing to provide GSL experiences as part of the nursing curriculum.^[6]

Research regarding GSL among nursing students has historically focused on the benefits of the experience^[7] and to a lesser extent on the pedagogical strategies used to assess learning and achieve student outcomes. Student learning outcomes that result from global experiences indicate that students' world views were broadened,^[8] and cultural awareness and understanding were increased.^[9,10] Students also develop skills related to intercultural communication, provision of culturally appropriate care,^[9,11] and leadership and social justice values.^[12]

It is recommended that students who engage in GSL experiences include reflection as a form of assessment and perspective transformation.^[6] However, a paucity of literature exists regarding which method of reflection is best suited for GSL.^[13] The Critical Reflective Inquiry (CRI) Model^[14] has the potential to serve as a standard framework for evaluating student learning from GSL experiences. The CRI Model has been used to enhance student learning in the clinical practicum,^[14] and to link course content with practitioner experience among registered nurse students returning for their baccalaureate degree.^[15]

In this qualitative descriptive study, the authors utilized an adaptation of the CRI Model as a framework for baccalaureate nursing student reflection. The goal was to better understand the nature of the practice events students chose to reflect upon during their week-long GSL immersion in Haiti, the reflective analysis of the situation, and their ability to critique the situation as being a catalyst to change future practice.

1.1 Background and significance

Global service-learning (GSL) experiences are gaining increased recognition as essential components of nursing education. These experiences align with the trend toward globalization of healthcare requiring nurses' attention to diversity, with a knowledge of and sensitivity to a variety of cultures.^[16]

Clinical immersion experiences provide opportunities to in-

crease self-confidence, shape professional image, and sense of belonging that facilitate the transition to competent and confident practice.^[16] Although increased recognition regarding the significance of GSL and reflection of the experience exists, there is limited empirical data related to the nature of situations upon which students give considerable thought, how they think through these situations and what insight and learning had been gained.

1.2 Reflective inquiry

Scholars generally agree that reflection is a key component in GSL.^[2,6,9,13] Additionally, the National League for Nursing^[17] challenges educators to create student learning environments that are focused on socialization to the profession and support self-reflection. Reflection is viewed as a deliberate cognitive process that requires active engagement of the individual. It is triggered by an unusual or perplexing situation, involves examining one's responses, beliefs and assumptions in regard to a situation and results in insights and new understanding.^[18] In international experiences, the reflective process is critical to gaining an understanding of the service experience, and developing understanding of complex problems, insights, and intentions for practice change.^[6,13]

1.3 About the global experience

As part of a five year partnership between the College of Nursing and an established medical program in rural Haiti, 10 nursing students participated in a one-week immersion experience during spring break. Content related to the experience was embedded in a 3 credit community nursing clinical course. Preparation for the Haitian experience began 7 weeks pre-trip with content presented around Global Health Core Content.^[6] Students partnered with the Haitian American Student Association on campus, and had weekly lessons on Creole medical terminology. Students conducted a community assessment of Haiti based on the Sunrise Enabler for the Theory of Culture Care Diversity and Universality Model.^[19,20] They prepared health promotion materials in Creole and collected over 650 pounds of supplies based on established health needs of the community through key informants. Additionally, students reviewed clinic-specific formularies and protocols recommended by the Haiti Department of Public Health, and World Health Organization.

Upon arrival, a walking tour of the neighborhood and discussion with local Haitians allowed for a better understanding of the residents' culture and life experiences. The medical program, run by a local Haitian physician and staff, is part of a larger organization that contains a health clinic, housing program, children's program, small business cooperative, and offers opportunities for higher education. Each student

spent 4–eight hour days working in the health clinic, and one half day constructing a concrete block home with housing program personnel. Through a reciprocal relationship^[2] students met the immediate health and educational needs of the local community identified by the Haitian medical staff. This experience allowed students to develop trust and teamwork skills, encounter ethical dilemmas unique to GSL, provide culturally safe health care, improve living conditions, gain knowledge about a different health care system, and attain personal and professional growth. The students and HCP assessed and provided care for 597 patients at the clinic over the course of the week.

2. METHODS

2.1 Design

The CRI Model^[14,21] is based within the broad conceptualization of reflective practice and has the potential to serve as a framework for learning from and evaluating one’s practice within GSL experiences. Derived from action science and critical philosophy, the CRI is based on Schon’s conceptualization of reflection-on-action and written narratives of

human action.^[22] The CRI Model^[14,21] is a structured approach to reflection consisting of three phases: Descriptive, Reflective and Critical. Each phase consists of a series of question cues that serve to guide the practitioner through reflection by exploring knowledge, beliefs, values and attitudes embedded in practice actions.

In the descriptive phase, the student constructs a written narrative describing in detail a practice situation or encounter, noting thoughts, feelings, actions and special features of the situation. In the reflective phase, the student refers to the written narrative to explore the salient features of the situation, personal beliefs, assumptions, outcomes and practice knowledge. Here, the student gains knowledge of the processes embedded within the situation, self-awareness of decision-making, knowledge gaps and assumptions guiding practice. In the final critical phase, the student is guided by the question cues in identifying learning that has occurred, insights into practice and ways that practice actions may be changed in the future. For the purposes of this study, the CRI Model was adapted for GSL as shown in Table 1.

Table 1. Guiding questions to explore global service learning in Haiti

Phase 1 Descriptive	Phase 2 Reflective	Phase 3 Critical
1) Describe in detail a practice situation or encounter while working in the clinic that you found rewarding or challenging, or about which you have given considerable thought to.	1) What were the important (salient) features of the situation you described?	1) Were your actions in the described situation best, most appropriate, and successful?
2) Be sure to note your thoughts, feelings, action and special features of the situation.	2) What aspects of the situation influenced your actions? In what ways? Why?	2) Were there other outcomes that you should have considered?
3) Does this depict a truthful and accurate description of actions of yourself and others (behaviors, happenings, speech and interactions)?	3) What sorts of values or ethical standards guided your actions or were evident?	3) Do you need to review your knowledge base or need additional knowledge? If so, why?
4) Did you exaggerate or minimize your feelings included in this description?	4) What was the knowledge that was important in this situation?	4) What have you learned from this situation?
	5) Why was this important?	5) How might this change your practice in the future?
	6) Did you possess the knowledge required in this situation?	
	7) What were the outcomes of the situation you wanted?	
	8) Did you achieve the outcomes you wanted in the situation you describe?	

Note. Adapted from Kim (1999) and Kim, Clabo, Burbank & Martins (2010)

2.2 Procedures and data collection

This study explored the use of CRI by baccalaureate nursing students traveling to Haiti for a GSL immersion experience. A qualitative design using data from guided student journals was utilized to address the following study aims: a) Identify the type of practice events student nurses chose to reflect upon, b) describe the process/es student nurses used to reflect on clinical practice situations, and c) explore subsequent changes to practice, if any, that occurred as a result of critical

reflection. A template analytical style of content analysis^[23] was used to analyze reflective journals from ten (10) students who wrote a total of thirty (30) journal narratives. This qualitative approach was useful for eliciting a rich description of real life events, without extensive theoretical deduction, and as a path to further research.^[24]

Study participants included a purposeful, convenience sample of ten (10) junior nursing students enrolled in a commu-

nity health nursing course, taught by the first author, at a University College of Nursing in northeastern U.S.

Study approval was obtained from the university's institutional review board. Students received general information about the study from the first author, and an overview of the CRI Model prior to immersion. Upon arrival in Haiti, students received detailed information, from the first author, about completing phase I (descriptive) of the CRI Model using the guiding questions (see Table 1) as a framework. During the immersion, time was allotted for a daily debriefing session, and to construct the descriptive phase of their reflective journal. After returning to the U. S., students were asked to complete the reflective and critical phases of their written journals as guided by question cues. In addition, students and faculty met on five occasions to debrief, reintegrate, and complete semester assignments.

Aware of potential issues of dual agency (*e.g.*, teacher and researcher role) several measures were taken to protect student rights.^[25] All students completed the same reflective journaling assignment irrespective of whether they had given consent to participate in the study. Voluntary participation was emphasized. Students were aware their decision to participate or not participate would not affect their course grade. Copies of consent forms were provided to students, but the first author left the room while students determined participation. The second author (not course faculty) collected and held consent forms until the end of semester grades were submitted. Subsequently, the second author informed the first author of students who consented to participate. The narratives of participating students were then analyzed by both authors.

2.3 Data analysis

Initially all of the reflective narratives were read independently by each author and then discussed in detail to elicit general impressions and an initial grasp of the student's use of CRI approach. The authors independently used a template style^[23] to analyze narratives in relation to the three study aims and three phases of CRI Model. Key statements and categories that emerged from the data were then compared within any one participant's narratives and across participant narratives. Findings for each guiding question were then agreed upon by authors.

Rigor was addressed through attention to components of trustworthiness through credibility, confirmability, dependability, and transferability.^[26] Credibility was enhanced through students' in-depth notes in the field, which served as a foundation when writing narratives. An audit trail of data analysis steps was maintained for purposes of confirmability, and de-

pendability. To enhance transferability, rich, vivid quotes were extracted from the manuscript to allow readers the opportunity to determine whether the use of CRI would be valuable and applicable to their nursing education context.

3. RESULTS

Ten junior nursing students (aged 20-27; two males and eight females) enrolled in the Community Health GSL experience, submitted their clinical journals to the first author. Thirty clinical journals were analyzed. In all situations described, the students were working one on one with a health care provider (HCP; registered nurse, nurse practitioner, or physician) at a health clinic in Port au Prince, Haiti; except when students worked off-site as part of the housing program. In most situations, local Haitian interpreters were present during each health clinic visit with the student and HCP. One practice situation is used throughout the following phases of Kim's CRI model (descriptive, reflective and critical) to provide insight into the reflection process and development of thinking from a nursing student's lens. The situation is depicted by Anna (pseudonym) as she encountered a 12-year-old boy, accompanied by his father, who presented to the clinic with a rash.

3.1 Descriptive phase

The descriptive phase of the study was intended to identify the type of practice events the students chose to describe and reflect upon during the weeklong immersion. It provided adequate structure for students to construct a written narrative to provide a detailed description of a practice situation or encounter that included their thoughts, feelings, and special features of the situation.^[14,21]

While many of the patients assessed in the clinic were healthy overall, students chose to reflect upon situations that included malnourished infants, children presenting with fevers, dehydration, constipation, tachycardia, ear infections, tinea capitis, rashes, end stage liver disease, pica, anemia, anorexia, blurred vision, Down Syndrome, brain injury, and delay in reaching developmental milestones. Anna described one encounter this way:

During a clinic well-visit, a 12-year-old boy came in complaining of a very itchy rash on both of his arms as well as his groin area. When asked how long it had been affecting him, he said about three years. The rash on his arms went up to his elbows, and was different from the rash on his groin area. Other than the rashes, the boy was relatively healthy, although thin. When asked about his diet, the boy stated he mostly ate eggs and bread. They [HCP] agreed that the rash on his arms looked like an allergic dermatitis (*e.g.*, one commonly seen with an egg

allergy). This was a tough thing to consider because eggs were the main source of the boy's nutrition. We could not definitively diagnose an egg allergy without allergy testing, which was not available to us, so we didn't want to tell the boy he couldn't eat eggs. In the end, we told him and his father, that the rash looked like an allergic reaction, probably related to something in his diet (and possibly eggs). We also gave him Benadryl to help decrease the itching and to help him sleep. The rash on the boys groin was diagnosed as a fungal infection. It turns out that the child did not have soap at home, which is common in Haiti, so he had just been washing with water. He also stated (when asked) that he usually wears long pants. We prescribed an anti-fungal cream to treat the [groin] rash, gave him soap to take home, taught him how to use it, [and] we advised him to wear shorts and clean underwear when possible.

As in this situation, students described most clinic patients they encountered as being "not gravely ill". The nature of the practice situations were described as mostly preventable and not seen in prior clinical rotations to date. However, social determinants (*e.g.*, limited access to routine health services and follow up, lack of education, poverty, poor living conditions, and high rates of unemployment) in the region made the clinic visits complex. Students described situations in which they provided health promotion education based on their knowledge of patients' education level and home environment, but recognized adherence to recommended interventions might be difficult to sustain. Although these situations were described as challenging in nature, they were also viewed by students as rewarding, resulting in both professional and personal growth.

3.2 Reflective phase

The reflective phase was proposed to allow students to refer to their descriptive narrative to explore its salient features, their personal beliefs, assumptions, outcomes and practice knowledge.^[14] Students were asked to deconstruct their prior journal entries and reflect on their beliefs, assumptions and knowledge through standards, situations, and intentions that guided their practice.^[14,21] Students struggled during this phase as they recalled ethical dilemmas they faced. For Anna, as she reflected on the 12-year-old boy with the rash, she stated that:

The most important aspects of this case involved teaching. It really upset me that this child had been suffering with these rashes for three years. It was also frustrating to be unable to find out what the boy was allergic to. This means the rash will not go away and could become more severe. The main ethical principle here was

non-maleficence 'to do no harm'. Had this child and his parents had basic health education, pediatric care, and resources (including soap), the rashes could have been treated right away. Here in the States, it is easy to get things like soap. The outcome I wanted was to provide education to the child and parent so they could prevent these problems in the future. The problem with this case was that yes, we gave the boy soap to wash with, but what happens when that bar of soap runs out?

This is one example of students' ability to reflect on the short term impact of their efforts, and patients lack of fundamental needs. Students identified their competence to "set their [patients] minds at ease", and to realize these experiences were "a very small situation in the larger picture". They also recognized that their head to toe assessment skills had improved during immersion. When reflecting on their work within the housing program, one student stated she now understood "the importance of assessing each child individually and get to know how their life was at home." They further described house construction work as "extremely rewarding. To be part of someone's new life is a great feeling". One student wrote, "I really think we are making a strong impact in here in Haiti. I am certain more than ever now that I made the right decision in coming."

In most cases, students stated they achieved desired outcomes in the situations described. They felt they made a "small dent" in patients' lives but "they couldn't do enough." Others wished they were able to follow up to see if "they [patients] remembered what we taught them." Through the use of reflective phase of the CRI model, students were able to describe the knowledge they gained of the processes embedded within the situation, self-awareness of decision-making strategies, their gaps in knowledge, and assumptions that guided their practice.^[14,21]

3.3 Critical phase

The critical phase is oriented in correcting and changing ineffective practice by recognizing inconsistencies between "values/beliefs and practice, intentions and actions, patient needs and nurses' actions identified in the reflective phase".^[19] For example, Anna continued to question disparities between U.S. and Haitian health care systems. She described that:

Knowledge about rashes was important, as were good assessment skills, but I don't know that we did anything for the rash on his [12-year-old boy] arms, as we never were able to find the cause. Our actions were the best we could do in this situation, and I think they [the boy and his father] will be successful, at least for a while. Did we give him the ability to be clean for a short time, only to have him feel worse? It's hard to come up with other

options in this case because my mind keeps jumping to what we could have done here in the U.S.; we could send him for allergy testing. I think we did the best we could with the limited tools we had.

Overall, students felt as if their actions were in the best interest of achieving success when they critiqued their prior journal entries. Primarily, they did not consider other outcomes, but felt constrained in working within the limited resources of the health clinic and it being “impossible to help every patient.” Students were able to articulate learning to “trust their instincts,” that “sharing a few words of wisdom can go a long way,” that it is “hard to break bad news” to patients, and the need to understand “how huge the Haitian heart is.” One student stated that “although we may not have had the resources we would have liked, I would like to think our teamwork and compassion for each one of our patients made up for it.”

3.4 Categories

Five categories emerged from the data analysis that corresponded to areas of learning, insights into practice and ways that practice may be changed in the future. These categories included: a) ethical dilemmas, b) health promotion, c) professional role modeling and power of team, d) challenges in communicating and making a connection, and e) respect of the Haitian perspective.

3.4.1 Ethical dilemmas

Students chose to describe situations that demonstrated moral reckoning (*e.g.*, critical and emotional reflection of motivations, choices, actions, and consequences of troubling patient care situations through transformation by how social actions are interpreted^[27,28] and ethical sensitivity skills (*e.g.*, the ability to recognize, recognize, interpret and respond to those receiving care).^[29] Students articulated this serendipitous finding by articulating their observation of a pervasive need for: a) public health infrastructure (*e.g.*, water, food, sanitation, housing, access to healthcare, pharmaceuticals, health education, and follow up care), b) increased employment opportunities, c) public education in schools, d) improved literacy rates, e) greater understanding of stigma regarding certain diagnoses (*e.g.*, HIV/AIDS, Down Syndrome, learning disabilities), f) modification of “first come first served” model of distributing care, supplies, and medication, g) privacy during medical consultations, and h) attention to lack of provision of care to children not supported through sponsorship programs.

One student described a situation where two patients in the same clinic room were diagnosed with an ear infection, but the clinic pharmacy “only had enough antibiotic for one of

the women. Only one of them was able to leave with the proper treatment. I wasn’t the one who had to really handle the situation because my patient had gotten there first, so she got the medication. This might change my practice in the future because I have now experienced an ethical problem, and I saw how the nurses all agreed what we should do about it. Having the nurses come to the same conclusion proves that you learn through experience.”

3.4.2 Health promotion

Students were able to identify educational needs and deliver appropriate instruction to patients across the life span, and described a lack of basic health information and accessible resources to address their health concerns. One student described a pediatric patient’s ear infection as a result of “showering in contaminated water; yet another situation in which public health services could have prevented the issue all together.” Additionally, students identified patient needs that were not met as a consequence of greater community issues that prohibited adherence to education and treatment protocols; prompting student dialogue about global strategies to overcome these issues. One student critiqued that “these situations have changed my practice for the future, by highlighting the importance of education in health care.”

3.4.3 Professional role modeling and power of team

Students described themselves as “becoming close” as they prepared for the experience, and developed a stronger sense of camaraderie with one another and HCP during immersion. One student stated, “whether we were taking care of each other, or taking care of the patients, we all worked together, and collaborated to get the job done.”

Students described situations where they obtained cues from HCP during the assessment and decision-making phases related to the environment and health care delivery system. Along with faculty and other HCP, a pediatrician from the U.S. was present each day to mentor the students in the well child clinic. Several students’ narratives focused on the professional work of nursing. One student described HCP as “making such strong connections” with patients and families, and having to “ask questions here in Haiti that you wouldn’t ask back in the states.” One HCP was described as being “one of the smartest people I have ever met”, making me “want to be the type of nurse she is. She was a million times better than a textbook.”

3.4.4 Challenges in communicating and making connections

Prior to immersion in Haiti, students participated in weekly Creole lessons. Even though paired with an interpreter in Haiti, they encountered challenges in communicating due to language barriers, and patients’ inability to read and compre-

hend instructions (e.g., prescription labels). In their journals, students expressed trepidation, when providing education and recommendations that patients and families may not have the ability to follow through with, especially when an interpreter was not present during a patient visit. In addition, students often found themselves comparing available health care provisions in Haiti to what they were accustomed to in the U.S.

One student described a situation where a mother was having difficulty feeding her 8 day old baby; having lost a child due to an inability to breastfeed in the past. The student recalled the HCPs “reinforcing to this woman that her baby would not survive if she did not continue to [breast feed] about eight times a day. And there was no way to sugar coat that, no matter how carefully the two providers tried to choose their words. It became much more real to me how ‘survival of the fittest’ in some areas of the world still is.” A second student described her practice may change in the future when stating that, “I will definitely be able to tell more about how my future patients are feeling by non verbal cues. I am now much more comfortable asking them intimate, sometimes awkward, questions. I think my ability to word questions in such a way that facilitate a truthful patient response has improved a lot because of this experience.”

3.4.5 Respect of Haitian perspective

The Haitian people were described as “just so friendly. It is extremely polar opposite from the U.S. in that sense.” Many students acknowledged the suffering and the burden they bore, but remarked of their resilience, and strong work ethic. One student articulated that, “they are extremely hard working people and I have all of the respect in the world for them.” Another student stated that “people in Haiti do not care about their own well-being when others in their family are sick. They are so much more concerned about their children and families; even the kids’ biggest concern is usually their families.”

While working construction with the housing program, a student described the scene as, “all around us were little kids trying to get our attention, just looking for someone to play with. Some children wore only a shirt, or just pants, or neither. It’s hard to think about how little they have; but still, they smile and laugh and play, and live their lives without a care.” The impact of culture, religion (including voodoo), patriarchal influences, stigma, and social and economic variables were also evident in student journals, and could potentially change future practice through one student’s ability to, “reevaluate my personal feelings about situations and remind myself that getting upset does nothing to help a situation.”

3.5 Limitations

Limitations of this study included having a small sample (N =10) from one nursing program whose GSL focus was on assistance in Haiti through medical clinics and construction work. More research is needed to explore its potential for use with a larger sample of students in a variety of GSL settings. Consistent with Lincoln & Guba’s (1985) work on trustworthiness of qualitative inquiry, findings of this study are provided in sufficient detail to allow the reader to evaluate the applicability, rather than generalizability, of this data to other contexts.^[26] Additionally, use of the CRI Model involved reliance on participants’ recall of events (thoughts, feelings, actions) they chose to journal about.

4. DISCUSSION

Use of the CRI in this study was a useful framework for student reflection as it allowed students to illuminate the progression of reflective thinking. Through guided questions, they were able to give considerable thought to practice situations encountered in Haiti, disclose how they deliberated these situations, and reveal what insight and learning had been gained.

In contrast to the current literature, students in this study were able to extract and describe issues related to ethics. This was demonstrated by their ability to articulate developing skills related to moral reckoning and ethical sensitivity, posing a challenge for educators about how to further develop these essential professional skills post GSL immersion. These are important outcomes of ethics based education; with ethical knowledge and moral reasoning skills being a precursor to professional behaviors in future nurses.^[30,31] The use of CRI also prompted students to reflect on and critique deeper questions regarding global issues, not likely to be resolved, as well as to critically think beyond the immediate care provided in the clinic.

Aside from students’ description of ethical issues, study findings were similar in nature when comparing results to other reported studies about GSL experiences.^[5] These included student outcomes related to broadened world views,^[8] increased cultural awareness,^[9] gaining skills related to intercultural communication, provision of culturally appropriate care,^[9,11] and leadership and social justice values.^[12]

In using CRI, students readily grasped the mechanics of the model, which was viewed as feasible. Consideration should be given to having the students complete all phases of the CRI while in the immersion experience. This may facilitate a deeper level of reflection and identification of the need for short and long term practice and/or community interventions. Further inquiry in exploring student’s perceptions of their

experience and those of their patients would further augment the findings.

Additionally, there is no literature regarding to what extent faculty should probe student reflection on experiences during the reflection and critical stages of CRI. Students in this study expressed frustration in being unable to facilitate change in Haiti, due to limited resources and poor public health infrastructure. Students were able to move from self to others, and recognize injustice in the world. However, it is difficult at this juncture to determine if reflection can be maintained and transform future practice. Perhaps closer examination during the critical phase is necessary to identify realistic change with follow up post immersion.

Future research may include the use of CRI with focus groups to improve recall of GSL experiences for students to prompt recollection of events, as many students recounted the same experiences in their journals from differing perspectives. It is

also recommended that a better understanding of the extent to which a GSL experience impacts long term approaches to nursing be studied longitudinally.

5. CONCLUSION

Based on the findings in this study, CRI was a useful framework for nursing students' reflection on a one week immersion experience in Haiti. Students described their thoughts, feelings and actions of the clinical practice situations they encountered in the clinic and at the construction site, reflected on their values and ethical standards, their knowledge base, outcomes, and identification of future changes in practice. Utilization of this structured approach allowed them to conceptualize their reflective practice to evaluate and gain insight regarding their GSL experiences.

CONFLICTS OF INTEREST DISCLOSURE

The authors declare that there is no competing interests.

REFERENCES

- [1] NSLC: learn and serve America [Internet]. New York: National Service-Learning Clearinghouse; c 2016 [cited 2015 Nov 27]. Available from: <http://gsn.nylc.org/clearinghouse>
- [2] Jacoby B. Service-learning in higher education. 1st ed. San Francisco: Jossey-Bass. 1996. 416 p.
- [3] Schultz C. Global service-learning and nursing education. *Nurs Educ Perspect.* 2011 Apr; 32(2): 73. PMID:21667784.
- [4] McKinnon TH, Fealy G. Core concepts for developing service-learning programs in nursing. *Nurs Educ Perspect.* 2011 Apr; 32(2): 95-100. PMID:21667790. <http://dx.doi.org/10.5480/1536-5026-32.2.95>
- [5] Curtin A, Martins DC, Schwartz-Barcott D, *et al.* Development and evaluation of an international service learning program for nursing students. *Public Health Nurs.* 2013 Apr; 30(6): 548-56. PMID:24579714.
- [6] Riner ME. Globally engaged nursing education: An academic program framework. *Nurs Outlook.* 2011 Jul; 59: 308-17. PMID:21784495. <http://dx.doi.org/10.1016/j.outlook.2011.04.005>
- [7] Asenso BA, Reimer-Kirkham S, Astle B. In real time: Exploring nursing students' learning during an international experience. *Int J Nurs Educ Scholarsh.* 2013 Jun; 10: 227-36.
- [8] Bently R, Ellison, KJ. Impact of a service-learning project on nursing students. *Nurs Educ Perspect.* 2005 Sept/Oct; 26 (5): 287-90. PMID:16295308.
- [9] Amerson R. The impact of service learning on cultural competence. *Nurs Educ Perspect.* 2010 Feb; 31(1): 18-22. PMID:20397475.
- [10] Ryan M, Twibell R, Brigham C, *et al.* Learning to care for clients in their world, not mine. *J Nurs Edu.* 2000 Dec; 39: 401-8. PMID:11138745.
- [11] Haloburdo EP, Thompson MA. A comparison of international learning experiences for baccalaureate nursing students: Developed and developing countries. *J Nurs Edu.* 1998 Jan; 37: 113-21.
- [12] Groh CJ, Stallwood LG, Daniels J. Service-learning in nursing education: Its impact on leadership and social justice. *Nurs Educ Perspect.* 2011 Nov/Dec; 32(6): 400-05. PMID:22235698. <http://dx.doi.org/10.5480/1536-5026-32.6.400>
- [13] Stallwood LG, Groh CJ. Service-learning in the nursing curriculum: Are we at the level of evidence-based practice? *Nurs Educ Perspect.* 2011 Sep/Oct; 32(5): 297-301. PMID:22029240. <http://dx.doi.org/10.5480/1536-5026-32.5.297>
- [14] Kim HS, Clabo L, Burbank P, *et al.* Handbook of reflection and reflective inquiry: mapping a way of knowing for professional reflective inquiry. New York: Springer; 2010. 606 p.
- [15] Asselin ME. Using reflection strategies to link course knowledge to clinical practice: The RN-to-BSN student experience. *J Nurs Edu.* 2011 Mar; 50(3): 126-33.
- [16] AACN: the essentials of baccalaureate education for professional nursing practice [Internet]. Washington DC: American Association of Colleges of Nursing; 2008 [cited 2015 Dec 4]. Available from: <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- [17] NLN: hallmarks of excellence [Internet]. Washington DC: National League for Nursing; c 2016 [cited 2015 Dec 1]. Available from: <http://www.nln.org/professional-development-programs/teaching-resources/hallmarks-of-excellence>
- [18] Rogers RR. Reflection in higher education: A concept analysis. *Innov High Educ.* 2001 Sept; 26(1): 37-57. <http://dx.doi.org/10.1023/A:1010986404527>
- [19] Leininger MM, McFarland MR. Transcultural nursing: Concepts, theories, research and practice. 3rd ed. New York: McGraw Hill Companies. 2002. 621 p.
- [20] Leininger MM, McFarland MR. Culture care diversity and universality: A worldwide nursing theory. 2nd ed. New York: Jones and Bartlett. 2006. 413 p.
- [21] Kim HS. Critical reflective inquiry for knowledge development in nursing practice. *J Adv Nurs.* 1999 May; 29(5): 1205-1212.

- PMid:10320505. <http://dx.doi.org/10.1046/j.1365-2648.1999.01005.x>
- [22] Schon DA. *The reflective practitioner*. 2nd ed. San Francisco: Josey-Bass. 1999. 384 p.
- [23] Miller WL, Crabtree BF. *Doing qualitative research*. Newbury Park, CA: Sage; 1999. 424 p.
- [24] Sandelowski M. Focus on research methods: Whatever happened to qualitative description? *Res Nurs Health*. 2000 Jan; 23: 334-40. [http://dx.doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](http://dx.doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)
- [25] Ferguson LM, Myrick F, Yonge O. Ethically involving students in faculty research. *Nurse Educ Pract*. 2006 Dec; 6(6): 397-403. PMid:19040907. <http://dx.doi.org/10.1016/j.nepr.2006.07.016>
- [26] Lincoln YS, Guba EG. *Naturalistic inquiry*. Thousand Oaks, CA: Sage. 1985. 416 p.
- [27] Nathaniel AK Moral reckoning in nursing. *West J Nurs Res*. 2006 June; 28(4): 419-38. PMid:16672631. <http://dx.doi.org/10.1177/0193945905284727>
- [28] Ketefian S. The relationship of education and moral reasoning to ethical practice: A meta-analysis of quantitative studies. *Sch Inq Nurs Pract*. 2001 Spring; 15(1): 3-18.
- [29] Weaver K, Morse J, Mitcham C. Ethical sensitivity in clinical practice: Concept analysis. *J Adv Nurs*. 2008 Jun; 62(5): 607-18. PMid:18355227. <http://dx.doi.org/10.1111/j.1365-2648.2008.04625.x>
- [30] Callister LC, Luthy K, Thompson P, *et al*. Ethical reasoning in baccalaureate nursing students. *Nurs Ethics*. 2009 Jul; 16(4): 499-510. PMid:19528105. <http://dx.doi.org/10.1177/0969733009104612>
- [31] McLeod-Sordjan R. Evaluating moral reasoning in nursing education. *Nurs Ethics*. 2014 Jun; 21(4): 473-83. PMid:24225058. <http://dx.doi.org/10.1177/0969733013505309>