Improving Awareness and Cultural Humility Through a Self-Study Module

Catherine H. Schultz

University of Utah

In Partial Fulfillment of the Requirements for the Doctor of Nursing Practice

Abstract

Purpose: The purpose of this quality improvement project is to improve healthcare worker awareness and cultural humility through a self-study training module as a means of improving patient care.

Background. The United States has experienced an increase in the growth of minority populations, which is anticipated to continue. Healthcare worker awareness and cultural humility can influence patient satisfaction, patient involvement, and, ultimately, health outcomes. Using the Precaution Adoption Process Model as a conceptual framework, it was anticipated that training healthcare workers on awareness and cultural humility would move participants from being unaware, unengaged, and undecided to being active and decisive in addressing any deficiencies that could threaten the quality of care they provide to diverse populations. While there have been a number of studies documenting the effects of interventions similar to the one used in this project, this project is unique in that the intervention is a self-study module.

Methods. Providers and support staff (n=54) participated in a one-hour training module on awareness and cultural humility that was developed through examination of the literature and the author's professional observations in caring for diverse populations. Participant demographic variables were measured and described using frequency distributions and summary statistics. Pre- and post-training survey quantitative data were analyzed using the Wilcoxon Signed-Rank test. Pre- and post-training open-ended questions were analyzed using content analysis.

Results. Pre- and post-training survey data for a total of 54 participants were available for analysis. There were statistically significant improvements in pre- versus post-training survey responses for 6 of the 10 survey questions. Qualitative survey responses revealed that video and case studies are effective means to teach awareness and cultural humility concepts.

Conclusions. This project demonstrated that a self-study training module can be an effective method for producing statistically-significant improvements in measures of awareness and cultural humility. While increases in measures of awareness and cultural humility do not guarantee greater engagement and action, they are a critical first steps in providing culturally-sensitive patient care. Samples with greater variance in demographic variables are needed to more fully assess the efficacy of the training.

Introduction

Education in global health principles is becoming an important component of healthcare worker training. The increasing globalization of the world and growth of minority populations in the United States demand an increase in provider cultural knowledge and skills (Finke, 2005). Global health education, particularly with regard to its central concepts of awareness and cultural humility, helps to meet these demands.

In an effort to speak from a common understanding, awareness and cultural humility merit definition. Awareness is defined as knowledge or perception about a situation, fact, or one's own prejudices and biases, strengths and limitations, beliefs and values, or attitudes and assumptions; it involves critical self-reflection, self-evaluation, self-critique, and contemplation of how initial reactions might impede an open, humble stance with others (Chavez, 2012; Hook, Davis, Owen, & DeBlaer, 2017; Krainovich-Miller et al., 2008; Tervalon & Murry-Garcia, 1998). Cultural humility is defined as a process of openness, self-awareness and egolessnes that incorporates self-reflection and critique after willingly interacting with diverse individuals, resulting in mutual empowerment, respect, partnerships, optimal care, and lifelong learning (Foronda, Baptiste, Reinholdt, & Ousman, 2016, p. 213). Cultural humility is encouraged as a higher standard than cultural competence and is now the preferred term. Cultural competence can be a good start, but can, at times, be harmful and lead to stereotyping (Institute for Healthcare Improvement, 2015). While there are various other definitions of awareness and cultural humility, this paper will speak from an understanding of the above definitions.

Problem Description

As stated above, the United States has experienced an increase in the growth of minority populations, which is anticipated to continue. In the state of Utah, greater than 43 percent of the

population growth is provided by minorities and greater than 20.7 percent of the total Utah population are minorities (Davidson, 2015). Salt Lake County was identified by the Garner Institute as having the most minorities in the state, making up 27 percent of the county's population (Davidson, 2015). Most of these minorities in Salt Lake County are Latinos (Davidson, 2015). In a seminal study of 1,816 adults, underrepresented minority patients viewed their patient-provider experience as less participatory than Caucasian patients (Cooper-Patrick et al., 1999). This highlights the impact of provider cultural knowledge and skills on patient satisfaction. Additionally, lack of cultural humility among providers has been shown to limit progress towards improved outcomes within the healthcare system (Foronda et al., 2016). Improving cross-cultural communication between providers and patients can improve health and increase patient involvement in care (Cooper-Patrick et al., 1999). As evidenced by these findings, cultural humility on the part of the healthcare provider can influence patient satisfaction, patient involvement, patient progress and ultimately, patient health.

Available Knowledge

Several authors have made a strong case for inclusion of global learning and global health competencies in nursing and other healthcare provider education (Baernholdt, 2014; Bozorgmehr, Saint, & Tinnemann, 2011; Davidson, 2015; Finke, 2005; Wilson et al., 2012;). Redden (2017), through a survey of 662 international students and 23 colleges and universities, provided concrete ways for professors to improve classroom learning of global health concepts, including cultural awareness. A subcommittee of the Consortium of Universities for Global Health (CUGH) developed interprofessional global health competencies across several domains for a basic operational level (Jogerst et al., 2015). These domains can be used by others seeking to develop training for healthcare professionals on such topics as cultural humility.

Other researchers have specifically examined training and education on the concept of cultural humility. A qualitative, descriptive study of 200 entries from 500 students aimed to teach healthcare provider learners to develop cultural humility, and identified several themes; reflection on experiences over time was identified as essential for the development of cultural humility (Schuessler, Wilder, & Byrd, 2012). Ortega and Faller (2011) taught cultural humility principles in child welfare service delivery through discussion and identification of several essential skills and practice principles. Butler and colleagues (2011) used expert interviews to create and integrate an eight-week educational program on cultural competency and humility for medical trainees. This method of teaching was found to be successful when integrated into the established medical curriculum (Butler et al., 2011). Conversely, Juarez et al. (2006) showed no significant changes in family practice residents' perceptions about cultural diversity following an educational intervention.

Thus, various methods have been used with varying degrees of success in educating students of healthcare professions and healthcare providers on global health topics, such as cultural humility. Knowledge on global health competencies and domains can inform future training topics, objectives, and anticipated outcomes. Knowledge on various methods of training, such as reflection and discussion, can help to inform educators on training in formats for lesson layouts and training modules. While there have been a number of studies documenting the effects of interventions similar to the one used in this project, no studies were identified as having delivered training through a self-study module.

Rationale

The Precaution Adoption Process Model (PAPM) is a conceptual framework used to design behavior change interventions (National Institutes of Health, 2005). This model defines

seven stages through which an individual progresses, including the following: unaware of issue, unengaged by issue, undecided about acting, deciding not to act or deciding to act, acting, and maintenance (National Institutes of Health, 2005). The intervention in this project was expected to work by inspiring providers and support staff, through creating awareness and engagement with the global health concepts, to lead them to decide to act on their deficiencies and to improve the quality of care they provide to diverse populations.

Specific Aims

The purpose of this study is to improve healthcare worker awareness and cultural humility through a self-study training module as a means of improving patient care.

Methods

Context

As a self-study module, the project took place in the homes and offices of healthcare workers in various settings. The initial plan was for the setting was to be at a free, non-profit 501(c)3 community clinic located in an Western US city that provides primary care services to pediatric and adult underserved patients from a variety of ethnic and cultural backgrounds, primarily Latino immigrants. However, one contextual factor that impacted the success of the intervention is that the majority of providers and support staff at the clinic are unpaid volunteers among a small sub-set of paid employees who work full-time. Many of the volunteers provide services only once weekly or even less frequently at once monthly or less. Invitation to participate in the self-training module was done via email through the volunteer coordinator, and response rates were limited.

Additional participants were recruited through other means, such as the author's professional contacts, including students and faculty at the University of Utah College of

Nursing. Social media, such as Facebook nurse practitioner groups, was also used to recruit participants. In summary, a convenience sample was collected through a variety of means.

Intervention

The intervention employed in this project was a one-hour training module on awareness and cultural humility, which was provided to the participants as a self-study training developed on an online teaching portal called Canvas Instructure. The module was developed through the author's personal experience as well as through examination of the literature on topics such as awareness and cultural humility.

The author of the module is a nurse practitioner with an anticipated doctoral degree in 2018. She has provided healthcare services to underserved multilingual/multicultural patients for nine years, including refugee, immigrant, LGBTQ, and incarcerated populations. Additionally, she has experience as healthcare provider both nationally and internationally, having participated in medical projects in South America, Central America, the Caribbean, and Africa. She is a current volunteer and preceptor at the aforementioned local free clinic that provides primary care to vulnerable populations, primarily immigrants.

Study of the Intervention

In order to assess the impact of the intervention and establish whether the observed outcomes were due to the intervention, a survey was distributed to assess the participants' knowledge, attitudes, and skills, focusing primarily on awareness and cultural humility. It was administered pre- and post-module participation, and included both closed- and open-ended questions. The author distributed the survey via a Canvas module course format. No comparison group was provided, however the author confirmed that no other projects on awareness or

cultural humility through self-study modules were going on around the time of the intervention. The author collected and analyzed the surveys.

Measures

Measures chosen for studying processes and outcomes. The number and demographics of participants were collected at the time of the educational training session as part of the pre-training survey (see Appendix A for demographic details). Participants were surveyed for improvements in awareness and cultural humility before and after training. The survey used was adapted from a single quantitative instrument created by the Association of American Colleges and Universities (Musil, 2006). The instrument was created through a collaborative process, which involved team members from the Liberal Education and Global Citizenship project as well as colleagues from eleven participating institutions (Musil, 2006). While it was intended to be used in pre- and post-semester coursework, it was adapted for this project to fit a pre- and post-training module experience. Adaptions included the exclusion of questions that were ill-fitting to a 1-hour course and the addition of open-ended questions to obtain qualitative data for more in-depth analysis. The author made these adjustments and reviewed the final survey with her faculty member for cohesiveness and fit.

Approach to the ongoing assessment of contextual elements. Time spent on the educational session was tracked, including the one-hour involved in the training module as well as the time spent on completing pre- and post-surveys. Input was sought out from stakeholders, including faculty at the affiliated university. Follow-up with aforementioned stakeholders provided opportunities for discussion as to repetition of training for future new employees and volunteers as well as discussion of sustainability of practice improvements. The contextual

element of cost was examined after completion of the intervention and was the sum of four Amazon $25 gift cards for a total of $100.

Methods employed for assessing completeness and accuracy of data. In order to ensure that the data collected was accurate and complete, the author routinely assessed for missing survey data and double-checked entry of data into spreadsheets. Additionally, the author obtained review of the data by a second party for accurateness.

Analysis

As a quality improvement project, this study utilized change in pre- and post-training module survey quantitative scores to assess for changes as a result of training. Descriptive statistics were used to describe the study sample (see Appendix A). Demographic and outcome variables were described using frequency distributions and appropriate summary statistics for central tendency and variability. The Wilcoxon signed rank test was used to measure the change in scores between pre- and post-training module participation, and the test was run for each of the 10 survey questions. Statistical Package for Social Sciences, or SPSS, Version 24 was used to analyze the data.

Qualitative data also resulted from open-ended questions included on pre- and post-training surveys. A content analysis was conducted on these open-ended questions. Words were read repeatedly and then coded, after which coded data were categorized, organized, and summarized.

Ethical Considerations

The University of Utah Institutional Review Board determined this study to be non-human subjects research and to fall under the category of Health Care Improvement. The author of the project does volunteer at one of the study sites, that of the free clinic, as a clinician and

preceptor to students, however, the author did not receive any compensation or fringe benefits for the work done on the study, and has no conflicts of interest.

Results

Intervention Steps and Process Measures and Outcome.

Over the course of this initiative, 54 participants completed the self-study training module and the pre- and post-training surveys. Demographic frequencies show that the majority of participants were of ages 35-44 years (40.7%), female (85.2%), Non-Hispanic White or Euro-American (74.1%), and Clinicians (48.1%). Analysis of the means across each of the 10 Likert scale survey questions resulted in a statistically significant improvement in 6 of the 10 post-training survey questions when compared to pre-training surveys. (see Appendix B). The most dramatic improvements were for Question 6: “I understand the difference between cultural competence and cultural humility” ($p<.001$) and Question 10: “I plan to aim for more cultural humility” ($p<.001$). While data was not thoroughly examined by healthcare worker type, preliminary analysis with a Kruskal–Wallis test suggests that there is not likely any change between professionals.

In addition to the abovementioned ten quantitative survey questions, three open-ended questions were asked on the post-training survey. In response to Question 1: “What aspects of this training were most informative, helpful, or effective?,” participant response themes included the case study vignettes (n=22), the video (n=14), and the definition slides clarifying cultural competence versus cultural humility (n=14). In response to Question 2: “What aspects of this training could have been done better?,” participant response themes included use of a shorter video (n=8), audio voice-over to accompany the slides (n=6), more discussion of the case studies with potential answers for each (n=5), and more visuals with less text (n=4). In response to

Question 3: “If you could change this course for future participants, what changes would you propose?,” participant response themes included more audiovisuals (n=7), a shorter video (n=6), and an in-person format to allow for facilitation of discussion (n=5).

Contextual Elements

While the intial plan for the intervention was to obtain the full sample of participants from the local free clinic, insufficient participants resulted in the need for further sampling outside of the clinic. As such, resulting participants were a convenience sample from all over the United States, including the author’s personal contacts as well as willing volunteers in response to the author’s postings on social media sites.

Additionally, an incentive was decided upon to compensate participants for time spent on the self-training module and surveys. A total of four Amazon $25 gift cards were given to four participants selected through a random number generator.

Details About Missing Data

It was evident that some participants started the training and did not complete both the pre- and post-training surveys. The author sent a reminder email to participants to remind them to complete both surveys. The data for participants who did not complete both surveys was not included in the analysis, as it was incomplete.

Discussion

Summary

As hypothesized, this investigation confirmed that a self-study module can be an effective method for producing statistically-significant improvements in measures of awareness and cultural humility.

Interpretation

Participants who participated in the self-study training module improved in their awareness and cultural humility as reported by their answers to Likert scale questions on the pre- and post-training surveys. While literature on the use of a self-study module as a method to improve awareness and cultural humility was not identified, findings of this study align with previous studies on the importance of improving healthcare worker awareness and cultural humility as a means to improve patient care. This training module took little time and participants were receptive. The intervention as delivered is inexpensive and can be provided to other healthcare workers in a similar manner.

Limitations

One of the limitations of this study is use of a relatively homogenous sample with regards to age, gender, racial or ethnic heritage, and role in healthcare. Additionally, use of Likert scale questions to assess awareness and cultural humility may be prone to measurement error, however their brevity could serve a practical purpose in future studies for follow-up assessments over time. Other important factors, such as whether awareness and cultural humility predict engagement and behavior change, were not measured or analyzed.

Conclusions

The main conclusion of this study is that awareness and cultural humility can be fostered through training delivered via self-study modules. While awareness does not guarantee engagement and action, it is a critical first step in proving culturally-sensitive patient care. This self-study training module is easily sustainable and can be provided to additional healthcare workers, regardless of their background. Samples with greater variance in demographic variables are needed to more fully assess the efficacy of the training.

References

Baernholdt, M. (2014). Educating culturally competent nurses at home and abroad. *Association of American Colleges and Universities: Diversity and Democracy, 17*(2), 28-29.

Bozorgmehr, K., Saint, V. A., & Tinnemann, P. (2011). The 'global health' education framework: a conceptual guide for monitoring, evaluation and practice. *Globalization and Health, 7*(8), 1-12.

Butler, P. D., Swift, M., Kothari, S., Nazeeri-Simmons, I., Friel, C. M., Longaker, M. T., & Britt, L. D. (2011). Integrating cultural competency and humility training into clinical clerkships: Surgery as a model. *Journal of Surgical Education, 68*(3), 222-230.

Chaves, V. (2012, August 9). Cultural humility: People, principles and practices [Video file]. Retrieved from https://www.youtube.com/watch?v=SaSHLbS1V4w&t=112s

Cooper-Patrick, L., Gallo, J. J., Gonzales, J. J., Vu, H. T., Powe, N. R., Nelson, C., & Ford, D. E. (1999). Race, Gender, and partnership in the patient-physician relationship. JAMA, 282(6), 583-589.

Davidson, L. (2015, June 24). Census: Minorities provide 66% of S.L. County growth in 2015. The Salt Lake Tribune. Retrieved from http://www.sltrib.com/home/2660603-155/census-minorities-provide-66-of-sl

Finke, L. M. (2005). Teaching in nursing: The faculty fole. *Teaching in Nursing: A Guide for Faculty*. 2nd ed. 3-20. Elsevier Saunders.

Foronda, C., Baptiste, D., Reinholdt, M. M., & Ousman, K. (2016). Cultural humility: A concept analysis. *Journal of Transcultural Nursing, 27*(3), 210-217.

Hook, J. N., Davis., D., Owen, J., & DeBlaer, C. (2017). *Cultural Humility: Engaging Diverse Identities in Therapy.* Denton, TX: American Psychological Association.

Institute for Healthcare Improvement (2015, May 6). Why use the term "cultural humility?" [Video file]. Retrieved from https://www.youtube.com/watch?v=_vBPyuOWCfk

Jorgerst, K., Callender, B., Adams, V., Evert, J., Fields, E., Hall, T., Olsen, J., Rowthorn, V., Rudy, S., Shen, J., Simon, L., Torres, H., Velji, A., & Wilson, L. L. (2015). Identifying interprofessional global health competencies for 21st-century health professionals. *Annals of Global Health, 81*(2), 239-247.

Krainovich-Miller, B., Yost, J. M., Norman, R. G., Auerhahn, C., Dobal, M., Rosedale, M., . . . Moffa, C. (2008). Measuring cultural awareness of nursing students: A first step toward cultural competency. *Journal of Transcultural Nursing, 19*(3), 250-258.

Kutob, R. M., Borhmans, J., Crago, M., Harris, J. M., Senf, J., & Shisslak, C. M. (2013). Cultural competence education for practicing physicians: Lessons in cultural humility, nonjudgmental behaviors, and health beliefs elicitation. *Journal of Continuing Education in the Health Professions, 33*(3), 164-173.

Maliheh Free Clinic Annual Report (2015). Retrieved from https://malihehfreeclinic.org/wp-content/uploads/2016/10/Maliheh-Free-Clinic-Annual-Report-2015.pdf

Musil, C. M. (2006). Assessing global learning: Matching good intentions with good practice. *Association of American Colleges and Universities*. Washington, D.C.

National Institutes of Health (2005). *Theory at a Glance, A Guide for Health Promotion Practice*. Retrieved from http://www.sbccimplementationkits.org/demandrmnch/wp-content/uploads/2014/02/Theory-at-a-Glance-A-Guide-For-Health-Promotion-Practice.pdf

Ortega, R. M. & Faller, K. C. (2011). Training child welfare workers from an intersectional cultural humility perspective: A paradigm shift. *Child Welfare, 90*(5), 27-49.

Redden, E. (2017). Teaching and integrating international students. *Association of International Education Administrators: Leaders in International Higher Education.* Retrieved from https://www.insidehighered.com/news/2014/02/20/gathering-senior-international-educators-integration-international-students-was

Schuessler, J. B., Wilder, B., & Byrd, L. W. (2012). Reflective journaling and development of cultural humility in students. *Nursing Education Research, 33*(2), 96-99.

Tervalon, M & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. *Journal for Health Care for the Poor and Underserved, 9*(2), 117-125.

Wilson, L., Harper, D. C., Tami-Maury, I., Zarate, R., Salas, S., Farley, J., Warren, N., Mendes, I., & Ventura, C. (2012). Global health competencies for nurses in the Americas. *Journal of Professional Nursing, 28*(4), 213-222.

Appendix A

Demographics Frequency Table

Age in years	Total (n=54) and n%
18-24	5 (9.3%)
25-34	10 (18.5%)
35-44	22 (40.7%)
45-54	16 (29.6%)
Not answered	1 (1.9%)
Gender	
Female	46 (85.2%)
Male	8 (14.8%)
Racial or Ethnic Heritage	
Black, Afro-Caribbean or African American	2 (3.7%)
East Asian or Asian American	4 (7.4%)
Latino or Hispanic American	4 (7.4%)
Native American or Alaskan Native	1 (1.9%)
Non-Hispanic White or Euro-American	40 (74.1%)
South Asian or Indian American	1 (1.9%)
Other	2 (3.7%)
Role in healthcare	
Clinician (MD, NP, PA)	26 (48.1%)
Front desk staff	1 (1.9%)
Medical Assistant	1 (1.9%)
Pharmacy specialist	2 (3.7%)
Registered Nurse	17 (31.5%)
Other	7 (13.0%)

Appendix B

Descriptive Statistics: Pre- and Post-Training Survey Questions and Data

	Pre *M* ± SD (range)	Post *M* ± SD (range)	*P* value
I am open to having my views challenged.	3.72 ± .71 (2-5)	4.09 ± .76 (2-5)	.001
I am aware of my own biases.	3.74 ± .62 (2-5)	3.89 ± .82 (2-5)	.146
I consider the influence society has on myself and others.	4.02 ± .72 (2-5)	4.33 ± .61 (3-5)	.006
I strive for tolerance of others with different beliefs.	4.35 ± .73 (2-5)	4.44 ± .66 (2-5)	.493
I am able to view a single issue from several different perspectives.	4.17 ± .75 (2-5)	4.30 ± .77 (1-5)	.176
I understand the difference between cultural competence and cultural humility.	2.98 ± 1.07 (1-5)	4.50 ± .84 (0-5)	<.001
I have an appreciation of the variability that can occur within a cultural group.	4.09 ± .76 (2-5)	4.52 ± .64 (2-5)	.001
I think my behaviors are influenced by my culture.	4.06 ± .90 (2-5)	4.24 ± .82 (2-5)	.094
I plan to aim for more awareness of self and others.	4.44 ± .69 (3-5)	4.78 ± .50 (3-5)	.002
I plan to aim for more cultural humility.	4.20 ± .76 (3-5)	4.78 ± .46 (3-5)	<.001