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Use of a Vietnamese Pain Scale and Report of Pain or Discomfort in Vietnamese Patients with Limited English Proficiency During the Post-Operative Period

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USE OF A VIETNAMESE PAIN SCALE AND REPORT OF PAIN OR DISCOMFORT
IN VIETNAMESE PATIENTS WITH LIMITED ENGLISH PROFICIENCY DURING
THE POST-OPERATIVE PERIOD

by

Kristine Nhung Ho

A Doctoral Project
Submitted to the Graduate School,
the College of Nursing and Health Professions
and the School of Leadership and Advanced Nursing Practice
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Nursing Practice

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ABSTRACT

Language and the ability to communicate with the patient are foundational for effective anesthesia/patient relationships (Rosse, Bruijne, Suurmond, Essink-Bot, & Wagner, 2015). The burgeoning population of Vietnamese people in the United States demands implementation of procedures to ensure adequate communication and safe care. The present project sought to determine if the Wong-Baker Vietnamese Pain Rating® Scale assisted Vietnamese patients with limited English proficiency to adequately report pain or discomfort relief during the post-operative period. A convenience sample of adults ($N = 25$) that meet inclusion criteria constituted the sample. Inclusive criteria were patients who were Vietnamese, between the ages of 30 and 70 years, self-defined as having limited English proficiency, and have been a patient who are or have been treated for pain. SPSS statistical analysis was used to calculate frequencies to determine if there were relationships between participants' responses and demographic variables. Sixty percent of the participants felt like they are least likely to believe that their healthcare providers understand their description of pain or discomfort. Seventy percent of the participants stated they were uncomfortable at their communication level. Interestingly, 100% of the participants have never been offered a Vietnamese pain rating scale to help them describe their level of pain or discomfort. As a result, this project met the specific aims and purpose set forth to help Vietnamese patients with LEP to adequately report pain and discomfort by utilizing the Wong-Baker FACES® Pain Rating Scale. With the Wong-Baker FACES® Pain Rating Scale, the communication limitation has eased and helped increase the comfort level in communicating with healthcare providers.

ACKNOWLEDGMENTS

I wish to thank my Committee Chair, Dr. Michong Rayborn; Committee members, Drs. Sheila Davis and Janie Butts; and supporting staff for their continued support in the completion of this endeavor. Also, I would like to recognize and thank the following: my parents, Mr. and Mrs. Van; my husband, Tony Ho; my two sons, Kyle and Kody Ho; other family members; and friends. A special thank you to Phyllis McCorkle for her exceptional editing and formatting skills and patience throughout the finalization of this project, and Dr. Lachel Story for the final touch.

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CHAPTER I - INTRODUCTION

The Vietnamese community has many impediments to overcome as immigrants in the United States. These impediments include the following: (a) lack of education, (b) cultural barriers, (c) inadequate health care, and (d) limited English proficiency (Hoeffel, Rastogi, Kim, & Shahid, 2012). The biggest barrier that they are currently facing in the healthcare system is the language barrier which is a challenge to quality health care and its providers (Wolz, 2015). According to Kopp and Shafer (2000), a human's life is incomplete without the ability to speak the language and be able to communicate. Language barriers limit the ability of healthcare providers to communicate with their patients and hinder the community's ability to seek adequate medical care (Rosse, Bruijne, Suurmond, Essink-Bot, & Wagner, 2015).

Background and Significance

Language and the ability to communicate with the patient is the foundation for becoming an effective anesthesia provider (Rosse et al., 2015). The inability to communicate has also been shown to be a threat to quality care (Rosse et al., 2015). The healthcare provider may feel frustrated and powerless with the patient when communication is limited (Kopp & Shafer, 2000). Hence, the healthcare profession assessing and educating on a practice change to enhance communication between anesthesia providers and Vietnamese patients is imperative. In order to minimize communication barriers between the patient and the healthcare provider, simple information and communication technologies (ICT) (e.g., Skype, Google Hangouts, Google translator, communication boards, and mobile phone cameras) are useful in

clinical settings (Kumar & Maskara, 2016). This project sought to add to existing evidence by focusing on communication enhancement.

PICOT/Project Question

Language and the ability to communicate will enhance a patient's interest in medical treatment. Will the Wong-Baker FACES® Pain Rating Scale help Vietnamese patients with Limited English Proficiency to adequately report pain or discomfort relief during post-operative? Being able to communicate will help the patient more likely to adhere to medical needs.

Synthesis Matrix

Language is one of the greatest barriers faced by the Vietnamese community (Wolz, 2015). With a language barrier, Vietnamese communities have limited English proficiency (LEP) which hinders their ability to obtain adequate health care. They are unable to articulate their level of pain or discomfort. An alternative solution to help increase communication between the patients and healthcare providers is via information and technologies communication (ICT) (Wolz, 2015).

Effective communication can help increase the satisfaction rate between the patients and the healthcare provider. The ability to communicate is the foundation for becoming an effective healthcare provider (Rosse et al., 2015). Rosse et al. believed that good communication between the patients and healthcare providers enhances patient safety and increases quality care. Patients are more likely to adhere to medical recommendations if they feel they can communicate and build a trusting relationship with healthcare providers (Rosse et al., 2015). The ability to communicate allows patients to report adequate levels of pain or discomfort and allows the healthcare providers to

adequately treat pain or discomfort levels to decrease the following: (a) level of unanticipated complications, (b) length of recovery time, (c) length of hospital stay, and (d) overall costs to the patient and the facility (Stomberg, Sjostrom, & Haljamae, 2003).

Kumar and Maskara (2016) promoted the use of ICT in ways to communicate with LEP patients. Examples of ICT are skype, google hangouts, google translator, and communication boards. These communication tools are used in addition to education and orientation programs (Kumar & Maskara, 2016). The Wong-Baker FACES® Pain Rating Scale is a tool that can benefit Vietnamese patients with LEP.

Good communication skills are one way to improve care while building a trusting relationship between LEP patients and healthcare providers. This DNP project has demonstrated that effective communication can help LEP patients communicate and be adequately treated for pain or discomfort.

Available Knowledge

Information and communication technologies have proven to be of immense use (Kumar & Maskara, 2016). ICT tools are available at all healthcare facilities despite language and geographical barriers (Kumar & Maskara, 2016). These authors have promoted the use of ICT among healthcare stakeholders and in educational programs. According to Health Information Translation (HIT) (2017), the Wong-Baker FACES® Pain Rating Scale can be an asset in addition to ICT during post-op. The ability to communicate is a beneficial outcome for healthcare providers as well as their patients (HIT, 2017). Communication enables healthcare providers to treat symptoms that may be related to pain, such as increased blood pressure and respiration rate (Rosse et al., 2015).

Stomberg et al. (2003) found that inadequately treated pain can prolong recovery time, increase costs, increase complications, and result in unplanned hospital stays.

According to White, Dudley-Brown, and Terhaar (2016), once a barrier is identified, there is a framework for translating and exploring these challenges and barriers. There is also a framework on how to address or overcome those barriers identified. Problems can be minimized by the awareness of the complexities of translation and addressing those complexities personally and individually (Wolz, 2015). By providing language services (e.g., interpreters, written materials, or communication boards) for those with LEP, satisfaction between patient and healthcare provider will increase. The trust built will strengthen the relationship between patient and healthcare provider as well as in the community (Almutairi, 2015).

Needs Assessment

Effective communication between the anesthesia provider and the patient is a key process to safe and quality health care (Almurairi, 2015). Anesthesia provider and patient relationships rely on good, effective communication, which results in improved patient satisfaction and better healthcare outcomes. Identifying communication barriers can help prevent adverse events; therefore, addressing this communication barrier can formulate strategies (e.g., organizational safety) and decrease healthcare costs based on access to preventive maintenance (Almurairi, 2015). By using the Wong-Baker FACES® Pain Rating Scale (2016) in Vietnamese, the Vietnamese patients can adequately communicate their pain or discomfort level to the anesthesia provider. In turn, the anesthesia provider can treat and manage their pain or discomfort level, thereby resulting in early discharge.

Certified Registered Nurse Anesthetists (CRNAs) have an important role in intraoperative management of a surgical patient. In order to avoid pain-associated stress and increase comfort for patients in post-operative stages, adequate pain relief is essential (Stomberg et al., 2003). This role also extends to postoperative care. The CRNA is responsible to assess and individualize a plan for adequate pain control according to the patient's physiological responses evoked by surgical stimuli during anesthesia. Inadequate pain management during the postoperative stage can (a) increase recovery time in the post-anesthesia care unit (PACU), (b) increase complications, (c) result in increased costs, and (d) increase the length of hospital stays (Stomberg et al., 2003).

Specific Aims

The purpose of this project was to help the Vietnamese patients with limited English proficiency to adequately report pain and discomfort by utilizing the Wong-Baker FACES® Pain Rating Scale and increase effective communication between a Vietnamese LEP patients and their healthcare provider during post-operative care. This knowledge will allow healthcare providers to adequately treat patients. Inadequate treatment of pain may increase complications, prolong recovery time, lead to a lengthy hospital stay, and increase costs of operation (Stomberg et al., 2003).

DNP Essentials

The Doctor of Nursing Practice (DNP) has eight essential elements according to the American Association of Colleges of Nursing (AACN) (2006). All eight essentials are required to fulfill the DNP objectives and were used in this project. Essentials I, II, and VI were the highlighted essentials. The details of these 3 essentials will be discussed in details.

Essential I is the scientific underpinnings for practice. The scientific underpinnings for practice were used by implementing a successful Vietnamese pain assessment—the Wong-Baker FACES® Pain Rating Scale. This scale allowed the patient to adequately report their pain or discomfort level to a healthcare provider who does not speak Vietnamese.

Essential II is the organizational and systems leadership for quality improvement and systems thinking. This essential was used as the aim of this project to offer Vietnamese communication tools. The communication tools also allow limited English proficiency patients to communicate their levels of pain and discomfort. The ability to communicate with their healthcare provider is important in treating pain adequately.

Essential VI is the inter-professional collaboration for improving patient and population health outcomes. This essential was used to include the Vietnamese community and healthcare providers to participate and collaborate together in order to enhance the level of training and knowledge through different communication devices available. These devices include but are not limited to, Skype, Google Docs, interpretation lines, communication boards, and mobile phone devices.

The DNP project has eight essentials that must be addressed. All eight essentials are addressed in this project. Essentials I, II, and VI were the main essentials that were focused on in this project. The eight essentials and their relationship to this project are outlined in Appendix A.

Project Model

Hildegard Peplau's theory of interpersonal relations was used as the foundation for this Doctor of Nursing Practice (DNP) project. According to Peplau (1952), being

able to assist an individual who is sick and in need of help is therapeutic to many nurses. Nurses can be viewed as an interpersonal connection between two or more individuals who share a common goal (Peplau, 1952). It is the CRNA's job to assess and communicate with the patient to adequately treat pain postoperative (Stomberg et al., 2003). This treatment can lead to a shortened stay in the PACU, decreased complications, decreased hospital stays, and decreased costs (Stomberg et al., 2003).

Procedure

Prior to implementing the project, approval was received from The University of Southern Mississippi Institutional Review Board (protocol number 17110201) (see Appendix B). Individuals in the Vietnamese community in Mississippi who met the criteria (between the age of 30 and 70 years, self-defined as Vietnamese with limited English proficiency, a prior patient in the American healthcare facility that had been or currently being treated for pain) were assessed. The Wong-Baker FACES® Pain Rating see adequately report their level of pain or discomfort. The sample was randomly selected based on convenience and availability at the time the phone call was made from the project facilitator. The population consisted of acquaintances of the project facilitator. The project facilitator is a known member of the Vietnamese community; therefore, she knew who would possibly fit the criteria. The Wong-Baker FACES® Pain Rating Scale was administered to the subjects in their respective homes. A short educational explanation was given to the participants, and the Wong-Baker FACES® Pain Rating Scale was introduced. The Wong-Baker FACES® Pain Rating Scale was used to help assess the accuracy of the scale in assisting LEP Vietnamese patients to

communicate their level of pain or discomfort to healthcare providers who do not speak Vietnamese.

Evidence Review

For this project, evidence was found by searching peer-reviewed and scientific journal articles in multiple databases. The databases used were EBSCOhost, MEDLINE, CINAHL with full text, primary search, academic search premier, and PUBMED and were limited between January 1, 2000, and July 1, 2017. The initial searches resulted in 3,460 articles pertaining to language barriers and communication is used as the search phrase. Communication technologies and communication boards were searched. After critically assessing all of the evidence for the most information for this project, six articles were evaluated concerning language barriers and communication and two articles for communication technologies and communication boards. For a literature matrix of the evidence, please see Appendix C.

Summary

Language and the ability to communicate with a healthcare provider is the core of a trusty relationship (Rosse et al., 2015). Evidence was found by searching through peer-reviewed and scientific journal articles. Patients are likely to adhere to medical treatments if they are comfortable and has a trust in their healthcare provider. Limiting communication barriers is imperative to minimize the discomfort that the patient is feeling by increasing communication through the use of informational and communication tools (Wolz, 2015). The Wong-Baker FACES® Pain Rating Scale was used to help limit the communication barriers between the healthcare provider and LEP patients.

CHAPTER II - METHODOLOGY

The aim of this project was to offer Vietnamese communication tools and allow healthcare providers and limited English proficiency patients to communicate the levels of pain and discomfort so they can be adequately treated. This chapter includes the population and sample, the instrument used in the study, method of data analysis, and dissemination of the data. The logic model was created to help guide the development of this project (see Appendix D).

Population and Sample

The Vietnamese community, in Mississippi, was used as the population of choice for this project. Twenty-five random samples who met the inclusive criteria were included in the project. The inclusion criteria included the following: (a) patients who are Vietnamese, (b) between the age of 30 and 70 years, (c) self-defined as Vietnamese with limited English proficiency, and (d) Vietnamese patients who had been or were currently being treated for pain as a patient in the American healthcare facility. The exclusion criteria included the following: (a) those who are not Vietnamese, (b) not in the age range of 30-70 years, (c) not self-defining as having limited English proficiency, and (d) had not been or were currently being treated for pain in an American healthcare facility. The collected data were used in statistical correlation tools. The data included age, sex, social economic status, years in the United States, and educational level.

Instrumentation

The sample ($N = 25$) was carefully selected and met the criteria requirements. The facilitator of this project, who is fluent in both English and Vietnamese, educated the participants in Vietnamese about the cultural and language barriers that the community is

facing in the United States. The project took place in the individuals' homes; however, some interviews were conducted over the phone for convenience. The Vietnamese Assessment Questionnaire and the English Assessment Questionnaire (see Appendices E and F) were used in this project to help assess the beneficial quality of the Wong-Baker FACES® Pain Rating Scale (see Appendix G) in assisting LEP Vietnamese patients to communicate their level of pain or discomfort to healthcare providers who do not speak Vietnamese. The assessment included how comfortable they are in communicating and describing their pain or discomfort level to the healthcare provider. The assessment was determined by using the Likert Scale by describing 1 as the *least likely* to be comfortable and 5 with *most likely* to be comfortable in communicating and describing their pain or discomfort level to the healthcare provider. The Vietnamese questionnaire was created by the facilitator of this project. Each education session took about 30 minutes to conduct, and the facilitator of the project was available to answer any questions with no time limitation. The Vietnamese questionnaire was created by the project facilitator based on sample questions from background information questionnaire on <http://www.bu.edu/gipgap/files/2011/04/PAIRTAPS.pdf>. The Demographic Questionnaire (see Appendix H) was developed to address age, gender, and socioeconomic status.

Data Analysis

After the educational session and the introduction of the Wong-Baker FACES® Pain Rating Scale to the Vietnamese community, the subjects received the Vietnamese Assessment Questionnaire. They were also given the demographic questionnaire to see if there were any correlations between the demographic and their ability to communicate.

These questionnaires helped assess if the Wong-Baker FACES® Pain Rating Scale is beneficial in assisting LEP Vietnamese patients to adequately communicate their level of pain or discomfort.

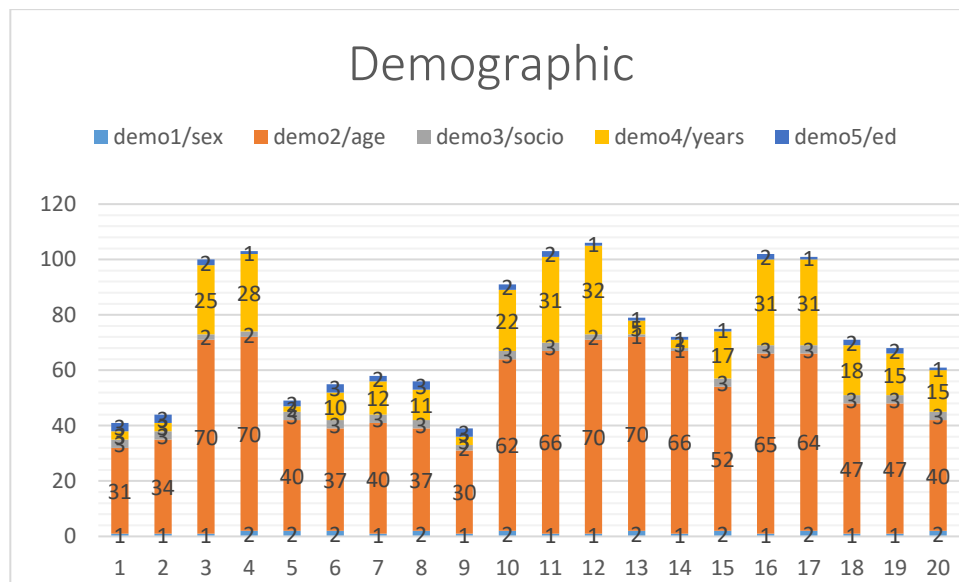
SPSS statistical analysts were employed to calculate frequencies and correlations among the demographic data survey questions. The mean and mode of all answers are in the results section and presented in Figures 1 and 2. The participants responded to the Vietnamese Assessment Questionnaire with 1 being *least likely* and 5 being the *most likely* in their comfort of communicating with their healthcare provider, communicating pain or discomfort level, and belief that a Vietnamese pain rating scale (Wong-Baker FACES® Pain Rating Scale) will help them communicate their level of pain or discomfort to their healthcare provider.

Summary

The Vietnamese community who had met the criteria were conveniently selected to participate in a Vietnamese and demographic assessment survey following a short educational session. The aim of this project was to introduce the Wong-Baker FACES® Pain Rating Scale to help the patient communicate with the healthcare provider. The mean and mode of the results will be calculated by SPSS statistical analysts.

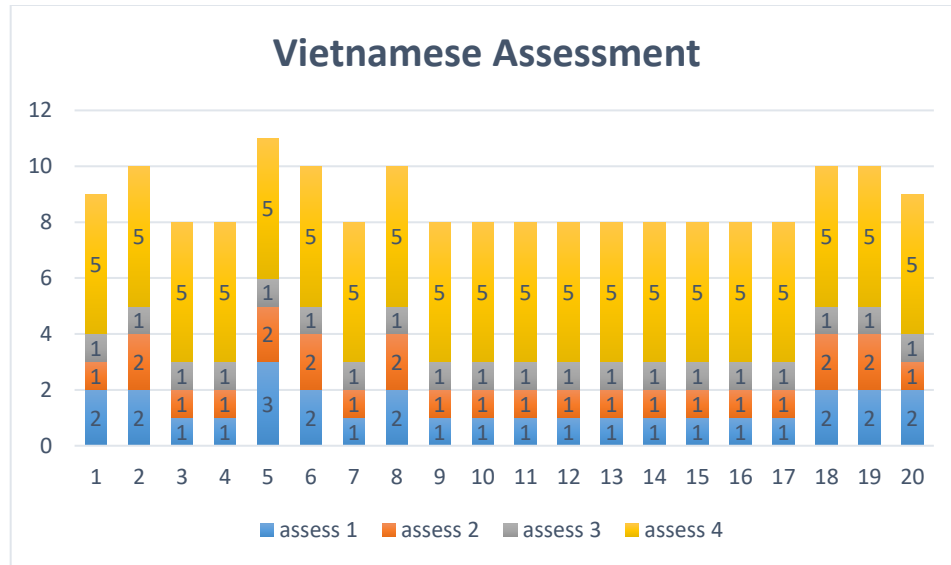
CHAPTER III - RESULTS

This DNP project explored the use of a Vietnamese pain rating scale to discover the benefits to the Vietnamese community with limited English proficiency (LEP) inadequately reporting their level of pain or discomfort. The inclusion criteria for this particular population were that they had to be Vietnamese, between the ages of 30 and 70 years, self-defined as limited English proficiency, and have been or currently seeking health care in an American facility for pain or discomfort.



Demographic questionnaire results.

Note. 1 = What is your gender? 2 = What is your current age? 3= What would you consider socioeconomic status to be? 4 = How many years have you been in the United States? 5 = What is your educational level?



Vietnamese assessment results.

Note. 1 = To what extent do you believe that your healthcare provider understands your description of pain or discomfort? 2 = What is your comfort level in communication pain or discomfort to your healthcare provider who does not speak Vietnamese? 3 = Have you ever been offered a Vietnamese pain scale to help you describe your level of pain or discomfort to your health care provider? 4 = To what extent do you believe that a Vietnamese pain scale will help you communicate your level of pain or discomfort to your health care provider? Answers 1 = least likely and 5 being most likely.

Data Collections

After carefully selecting a sample within the Vietnamese community who met the criteria set forth, the Demographic Questionnaire was given first with the following questions:

1. What is your gender?
2. What is your current age?
3. What would you consider your socioeconomic status to be?
4. How many years have you been in the United States?
5. What is your educational level?

The age of the participants ranged from 30 to 70 years with the average age of 50.7 years. The socioeconomic status of the participants ranged from poverty to middle

income with no one in high-income range. The average socioeconomic status was between low and middle income. The years that the participants have been in the United States ranged from 2 -32 years with an average of 15.85 years. The education of the participants ranged from no education to high school graduate with no college graduates reported. The average education of the selected participants was grade school.

After the demographic questionnaire was given to the participants, the Vietnamese Assessment Questionnaire was administered to the participants. The following questions were posed with the answers from 1 to 5, with 1 being the *least likely* and 5 being the *most likely*:

1. To what extent do you believe that your healthcare provider understands your description of pain or discomfort?
2. What is your comfort level in communication pain or discomfort to your healthcare provider who does not speak Vietnamese?
3. Have you ever been offered a Vietnamese pain rating scale to help you describe your level of pain or discomfort to your healthcare provider?
4. To what extent do you believe that a Vietnamese pain rating scale will help you communicate your level of pain or discomfort to your healthcare provider?

Sixty percent of the participants felt like they are least likely to believe that their healthcare providers understand their description of pain or discomfort. Seventy percent of the participants stated they were uncomfortable at their communication level. Interestingly, 100% of the participants have never been offered a Vietnamese pain rating scale to help them describe their level of pain or discomfort. Moreover, 100% of the

participants believed that with the Vietnamese Wong-Baker FACES® Pain Rating Scale they are able to communicate with their provider better.

Summary

As a result, this project met the specific aims and purpose set forth to help Vietnamese patients with LEP to adequately report pain and discomfort by utilizing the Wong-Baker FACES® Pain Rating Scale. Lack of communication skills hinders the ability of the patient to seek adequate medical care (Rosse et. al, 2015). With the Wong-Baker FACES® Pain Rating Scale, the communication limitation has eased and helped increase the comfort level in communicating with healthcare providers.

CHAPTER IV - DISCUSSION

The language and the ability to communicate with the patient are fundamental for effective anesthesia/patient relationships (Rosse et al., 2015). Ineffective communication with patients is a threat to quality care (Rosse et al., 2015). The burgeoning population of Vietnamese people in the United States demands implementation of procedures to ensure adequate communication and safe care. Nowhere is this principle more important than inpatient encounters surrounding surgery. Preliminary data suggested that neither the accessible population of Vietnamese patients in the southeastern part of the United States nor the nurses caring for them had any experience with the Wong-Baker FACES® Pain Rating Scale.

Dissemination

This DNP project was presented as a poster presentation at the 2017 International Transcultural Nursing Conference in New Orleans, Louisiana, to increase awareness and bring forth more communication tools that can be available to communities with LEP patients. Even though this particular project was targeted specifically for the Vietnamese community, many other communities with limited English proficiency populations may also benefit from the benefits of this project. The Wong-Baker FACES® Pain Rating Scale is available and translated into over 50 different languages and dialects (Wong-Baker FACES® Foundation, 2016).

Future goals for this project are to increase awareness and communication between the patient and healthcare provider in reporting and treating pain or discomfort. The current author plans to publish this project in the *Journal of Transcultural Nursing* to help increase the significance of communication tools and their benefits. This project can

help patients adequately report their level of pain or discomfort and allow the healthcare providers to adequately treat their pain levels.

Limitations

This DNP project has one notable limitation—the language barrier. The selected participants were limited in English that created a limitation in communication. The project facilitator is fluent in both English and Vietnamese; so, therefore, the project limitation was surpassed.

Future Directions

In the future, the goal of this DNP project is the widespread use of the Wong-Baker FACES® Pain Rating Scale in every community with limited English proficiency patients that are facing the barrier of communication with their healthcare providers. The Wong-Baker FACES® Pain Rating Scale would be beneficial if it could be part of the patient's communication skills to help limit the language barrier. This will help increase the level of trust between the patient and their healthcare provider and limit hindered care in the community.

Conclusion

The Wong-Baker FACES® Pain Rating Scale is currently being translated into over 50 different languages (Wong-Baker FACES® Foundation, 2016). The Wong-Baker FACES® Pain Rating Scale is a communication device that can help limit the language barrier that the Vietnamese community with LEP currently faces. Research has proven that the Vietnamese Wong-Baker FACES® Pain Rating Scale is beneficial and will help the Vietnamese LEP patient to adequately report pain or discomfort relief during the postoperative stage.

APPENDIX A – DOCTOR OF NURSING ESSENTIALS

Doctor of Nursing Essentials	How the Essentials are Achieved
I. Scientific Underpinnings for Practice	By implementing a successful Vietnamese pain assessment by using the Wong-Baker FACES® Pain Rating Scale
II. Organizational and Systems Leadership for Quality Improvement and Systems	The aim of the DNP is to offer communication tools and allow health care providers and limited English proficiency patients to communicate levels of pain and discomfort.
III. Clinical Scholarship and Analytical Methods of Evidence-based Practice	Evidence in improvement in health outcomes and patient satisfaction will occur when providers are able to communicate with the patient.
IV. Information Systems/ Technology and Patient Care Technology for the Improvement and Transformation of Health Care	Communication technology devices, such as Skype, google documents, interpretation lines, communication boards, and mobile phone devices will be used.
V. Health Care Policy for Advocacy in Health Care	Health policy and the need for communication skills to deliver quality and safe care to the patient are addressed in the DNP project to fulfill this essential.
VI. Inter-professional Collaboration for Improving Patient and Population Health Outcomes	The DNP project includes the Vietnamese community and healthcare providers to participate in order to enhance the level of training and knowledge of communication devices available.
VII. Clinical Prevention and Population Health for Improving the Nation's Health	The goal of the DNP project is to improve communication and therapeutic relationship between healthcare providers and LEP patients. Improvement in communication and understanding can lead to a decrease in mortality and morbidity.
VIII. Advanced Nursing Practice	The evaluation of evidence-based data, the usage of the data, the application for practice change, and utilization of knowledge in clinical are part of the future of advanced practice nursing.

APPENDIX B - APPROVAL OF THE USM INSTITUTIONAL REVIEW BOARD



INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 17110201
PROJECT TITLE: Use of a Vietnamese Pain Scale and Report of Pain or Discomfort in Vietnamese Patients with Limited English Proficiency During the Post-operative Period
PROJECT TYPE: Graduate Project
RESEARCHER(S): Kristine Ho
COLLEGE/DIVISION: College of Nursing
DEPARTMENT: Leadership and Advanced Nursing Practice
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Exempt Review Approval
PERIOD OF APPROVAL: 11/27/2017 to 11/26/2018
Lawrence A. Hosman, Ph.D.
Institutional Review Board

APPENDIX C – LITERATURE MATRIX

Author/ Year/Title	Level/ Grade	Design	Sample/ Data Collection	Findings	Limitations	Recommendation
Almutairi, K. M. (2015). “Culture and Language Differences as a barrier to the provision of quality care by the health workforce in Saudi Arabia.”	1/A	Comprehen- sive Systematic Review	N/A	<p>“Effective communication with patients and healthcare workers is a key process in safe and quality health care. Patient and clinician relationships rely on good communication, resulting in improved patient satisfaction, adherence to medical recommendations, and better healthcare outcomes.</p> <p>Language proficiency of a patient or a health care provider is a significant factor that is needed for effective communication.</p> <p>When a provider’s language differs from his or her patients, preventable adverse events may occur.</p> <p>Barriers in communication between patients and healthcare workers often cause unnecessary errors, excess pain, poor quality care, and even death.”</p>	N/A	Available information provided by this review study shows that there is a communication barrier between patients and healthcare providers.

Author/ Year/Title	Level/ Grade	Design	Sample/ Data Collection	Findings	Limitations	Recommendation
Kumar, A., & Maskara, S. (2016). "Overcoming language barrier in healthcare settings using information and communication technologies."	4/D	Expert Opinion	N/A	"The use of simple technologies, such as Skype and Smartphone camera provided to be of immense use. Modern IT gadgets can provide users with useful tools for the outreach of the healthcare facility despite language and geographical barriers. Therefore, we advocate to promote the use of ICT tools among healthcare stakeholders, in addition to educational and orientation programs regarding language."	N/A	
Stomberg, M., Sjoström, B., & Haljamae, H. (2003). The role of the nurse anesthetist in the planning of post-operative pain management.	4/D	Questionnaire	160 questionnaires sent out, and 101 were completed .	"The nurse anesthetist has an important role in the intraoperative management of surgical patients by assessing and pharmacologically moderating physiological responses evoked by surgical stimuli, insufficient depth of anesthesia, or both. Roles of the nurse anesthetist in planning of early postoperative pain management for surgical patients."	N/A	"The nurse anesthetist is intimately involved in the preoperative and intra-operative care. Our previous studies have clearly documented a considerable knowledge among nurse anesthetists intraoperatively during general anesthesia to assess the response pattern of the individual patient from observations of direct and indirect physiological responses."

Wolz, M. M. (2015). "Language barriers: Challenges to quality healthcare."	1/A	Systemic Review	N/A	"Language barriers pose significant challenges to providing effective and high-quality health care. Health-care providers should also be open to alternative solutions the patient provides, such as mobile translators or other electronic devices Professional interpreters could raise the quality of clinical care for patients with language barriers to approach or equal that for patients without language barriers."	N/A	
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APPENDIX D – LOGIC MODEL

Inputs	Activities	Outputs	Outcomes		
			Initial	Intermediate	Long-term
			<p>Literature review on evidence-based practice research and communication tools for LEP patients.</p>	<p>Selecting articles best suited for the project.</p> <p>Schedule time for teaching and assessment in the community.</p> <p>Organizing data</p>	<p>Educational material/Power point presentation</p> <p>English and Vietnamese questionnaire</p> <p>Wong-Baker FACES® Pain Rating Scale</p> <p>Brochure given to local clinics and hospitals</p> <p>Presentation at conferences</p>

APPENDIX E – VIETNAMESE ASSESSMENT QUESTIONNAIRE

Bao Cao Con Dau Bang Quy Mo Tieng Viet Cho Nhung Ngươi

Khong Biet Tien Anh

(Hay tra loi nhung cau hoi sau day voi so 1 la rat it va so 5 la rat nhieu)

1. Cac ban co tu tin la bac si hieu duoc noi dau hay su kho chiu cua ban khong?

1 2 3 4 5

2. Muc do thoa mai cua ban khi tam su hoac noi chuyen voi bac si khong phai la người viet?

1 2 3 4 5

3. Ban co bao gio ap dung hoac giai thich su dau don hay kho chiu cua ban qua quy mo dau bang tieng viet khong?

1 2 3 4 5

4. Cac ban nghi the nao neu bac si ngoai ngu sai quy mo dau bang tieng viet de giup ban giai thich duoc su dau don hoac kho chiu cua ban?

1 2 3 4 5

APPENDIX F –ENGLISH ASSESSMENT QUESTIONNAIRE

Please answer the following questions with 1 being the *least likely* and 5 being the *most likely*.

1. To what extent do you believe that your healthcare provider understands your description of pain or discomfort?

1 2 3 4 5

2. What is your comfort level in communicating pain or discomfort to your healthcare provider who does not speak Vietnamese?

1 2 3 4 5

3. Have you ever been offered a Vietnamese pain scale to help you describe your level of pain or discomfort to your healthcare provider?

1 2 3 4 5

4. To what extent do you believe that a Vietnamese pain scale will help you communicate your level of pain or discomfort to your healthcare provider

1 2 3 4 5

Vietnamese



0
No Hurt



1
Hurts
Little Bit



2
Hurts
Little More



3
Hurts
Even More



4
Hurts
Whole Lot



5
Hurts
Worst

English: Do you have any pain?

Vietnamese: **co dau cho nao khong?**

0		English: no pain Vietnamese: khong dau
2		English: mild pain Vietnamese: dau mot chut
4		English: moderate pain Vietnamese: dau nhieu
6		English: severe pain Vietnamese: dau that nhieu
8		English: very severe pain Vietnamese: dau that nhieu
10		English: worst possible pain Vietnamese: dau lam chiu khong noi

Source: Wong-Baker FACES® Foundation. (2016). Wong-Baker FACES® Pain Rating Scale. Retrieved from <http://www.WongBakerFACES.org>

APPENDIX H – DEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions to the best of your knowledge:

1. What is your gender?
 - a. Male
 - b. Female
 - c.
2. What is your current age?
3. What would you consider your socio economic status to be?
 - a. Poverty
 - b. Low income
 - c. Middle income
 - d. High income
4. How many years have you been in the United States?
5. What is your educational level?
 - a. No education
 - b. Grade school
 - c. High school graduate
 - d. College graduate

Nhan Khau

(Hay tra loi nhung cau hoi sau day)

1. Gioi cua ban la gi?
 - a. Nam
 - b. Nu
2. Hien tai ban bao nhieu tuoi?
3. Kinh te cua ban hien tai la gi?
 - a. Khong du song
 - b. Rat thap
 - c. Trung binh
 - d. Rat kha gia
4. Ban da song o my duoc bao nhieu nam roi?
5. Hoc van cua ban hien tai la nhu the nao?
 - a. Khong co hoc thuc
 - b. Co mot chut hoc thuc
 - c. Trung hoc
 - d. Dai hoc

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