2021

Lived Experiences of Nurses Caring for Limited English Proficient Patients During a Pandemic

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Thomas Cain

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Walden University
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Abstract

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ADN, Excelsior College, 2013

MA, Colorado State University, 2012

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Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Nursing

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Abstract

This study addressed the need to better understand how a patient's healthcare is influenced by lack of health literacy for limited English proficient patients during the COVID-19 pandemic. While registered nurses are a key component in the patient care continuum, there is a lack of evidence to understand the experiences caring for this vulnerable population during a pandemic. Framed by Roy's adaptation model and Orem's self-care deficit nursing theory, the purpose of this interpretative phenomenological study was to explore the lived experiences of registered nurses who cared for limited English patients diagnosed with COVID-19 in 2020. Seven registered nurses participated in semistructured interviews. The interviews were conducted remotely due to the ongoing COVID-19 safety guidelines in place during the time of this study. After transcribing audio interviews, the data was manually coded and four emergent themes were organized: (a) nurse compassion, (b) barriers to care, (c) patient and their family, (d) communication challenges. Twelve subthemes were identified that support the major themes. Communication challenges were the focus of the study and findings from this study could focus on a means of effective and feasible communication between healthcare providers and their target population. Positive social change is possible by recognizing the dynamic need for adequate translation resources, especially when the pandemic's influence can quickly outpace a system's design.

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Dedication

This dissertation is dedicated to my father who nurtured an insatiable curiosity, my mother who asked if nothing was not impossible, and my son for being the person I wished I could have been.

Most importantly, to whatever makes all the beauty in this world continue on, thank you.

Acknowledgments

Dr. Carolyn Sipes served not only as a committee chair for this dissertation, but also as a guiding coach, keeping me encouraged and focused not on the beach, but just one grain of sand. Also, my thanks to Dr. Maria Ojeda for her guidance and input over the years.

To the nurses who participated in this study, I would like to acknowledge the degree of compassion shown to complete strangers who come to them for care. It was a truly humbling experience to be part of the nursing experience during this study.

Finally, this was possible because Kelly Jane Harris told me of a better path to nursing.

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Chapter 1: Introduction to the Study

The social problem that prompted me to search the literature involved observations made as a registered nurse while discharging patients whose primary language was not English. It became clear that the discharge instructions given to patients who were English proficient and those who were not proficient in English resulted in different degrees of success when asking for demonstration of selfcare teach-back methodology. Later, when working in a hospital which had a higher percentage of patients with limited English proficiency compared to previous nursing experience, the degree in which the customer experience was influenced again piqued my interest after noticing gaps in efficient healthcare management. A query if these gaps could possibly have been explained by language discordance began to persist. The overall difficulty in answering this question was complicated by a multitude of factors, including limited ability to interact with patients due to language discordance. Thus, a review of the literature was initiated to better understand the prevalence and possibility of investigating this issue. While not comprehensive, the negative influence of low health literacy on healthcare access, and importantly the contributing effect of limited English proficiency (LEP) began to emerge as a problem which needed to be investigated. During this inquiry the development of COVID-19 began, and the focus shifted toward trying to understand the experiences of nurses caring for patients and how their healthcare access is influenced by health literacy and LEP. Documenting the lived experiences of registered nurses during this time will give a better understanding of how patients are managing their healthcare needs considering low health literacy and limited English proficiency. Future studies can benefit by using the unique shared experiences of the nursing profession's individuals; these professionals spend the most time with patients during their care experience and have the opportunity to build trusting relationships to better understand patient needs. This study begins with an explanation of the study's intent, and theoretical foundations, identify the nature and key elements, and examine its possible significance.

Background of the Study

In the United States, non-English speaking individuals are less likely to have access to health care and have lower health literacy than English speaking populations (Shah & Diaz, 2021). LEP has been shown by numerous authors to have significant influence on healthcare outcomes (Berdahl & Kirby, 2018; Diamond et al. 2019; Suarez et al., 2021). Hyun et al. (2017) compared LEP patients with English proficient patients and found LEP patients had longer reperfusion times for ST elevation myocardial infarction (128 vs. 87 minutes) compared to English proficiency patients. Nurses were more likely to discuss all components of safe discharge with 53% English proficient patients compared to 9% of LEP patients (Choe et al., 2021). Adult patients with low health literacy had 2.3 times the number of preventable emergency department (ED) visits resulting in hospital admission compared with adequate health literacy patients (Balakrishnan et al., 2017). Jang & Kim (2019) found that after controlling for covariates the risk of communication problems for LEP patients in healthcare settings were 4.95 times as great, having no usual place for care was 2.09 times greater, 1.69 times as great for no regular check-up, and unmet needs for medical care were 1.89 times as great. LEP older adults had 68% increased risk of being in poor or fair health compared to English speaking only patients (Ponce et al., 2005). In the United States, there is a high correlation between English proficiency and health literacy, and these factors are strong predictors of overall health status (Feinberg et al. 2020).

Health literacy illustrates whether people are equipped with an understanding of and ability to communicate about health services (Hai-YanYu et al., 2020). In the United States, 88% of adults have health literacy limitations and 36% of adults, 80 million individuals, are classified as having a low level of health literacy (Loan et al., 2017). A result of interactions of subjective and objective factors, levels of health literacy are associated with education level, income, occupation, and health status (Hai-Yan Yu et al., 2020). Low levels of health literacy have been associated with self-reported poor health status in many diverse populations, even when controlling for education and other predictors of health status (Sentell & Braun, 2012). Despite the documented importance of health literacy since the 1990s, low level health literacy remains a large contributor to health disparities (Kim, D. et al., 2020). Transplant patients are screened for health literacy as it has been identified that low health literacy patients have more inpatient hospitalization stays, more emergency room visits, lower health status, and higher risk of mortality (Miller-Motero et al., 2015); transplant patients with adequate health literacy demonstrated increased understanding and confidence in pharmaceutical management post-operative (Jones et al., 2016). Low health literacy has been identified as the most pressing barrier to early breast cancer detection with mammography (Becerra et al., 2018) and a barrier to effective patient engagement in hand surgery (Menendez et al., 2016). Patients with low health literacy undergoing major abdominal surgery were noted to have an additional day of hospitalization postoperative compared to patients with adequate health literacy (Wright et al., 2018). Low health literacy patients not only have less knowledge, but also fewer resources for efficient navigation of health care systems (Alokozai et al., 2018).

Registered nurses can help patients navigate a health care system and make difficult decisions that can be physically and emotionally distressing (Wittenberg et al., 2018a). However, registered nurses were found to incorrectly identify patients with low health literacy, with overestimations outnumbering underestimates by 6:1 (Dickens et al., 2013). This problem is compounded by experienced nurses having more difficulty with low health literacy patients than less experienced nurses (Wittenberg et al., 2018a). In the setting of informed consent, it is important for nurses to understand the importance of their patient’s health literacy, and to be aware of techniques such as teach-back methods to ensure patients and their families are aware of risks, benefits and alternatives to treatments offered (Burks & Keim-Malpass, 2019). Employed in many areas of healthcare and public health, registered nurses are uniquely positioned to interact with patients and create cultural change to improve health literacy (Loan et al., 2017).

Health literacy became a recognized tool to influence the development of COVID-19 early in 2020 as behavioral pattern changes were needed for all members of the public (Paakkari & Okan, 2020). However, as the abundance of health information has never in human history been so readily available or in such abundance, relying on libertarian principles to allow individuals to make the right choice easily becomes difficult with subsequent behaviors of overreacting (e.g. panic shopping) and underreacting (e.g. refusal to follow governmental guidelines or mandates) taking place across the globe (Abel & McQueen, 2020). The term infodemic, short for information pandemic, was first coined in the severe acute respiratory syndrome (SARS) outbreak in 2003 and is recognized as a phenomenon that portrays a rapid spread and amplification of vast amounts of valid and invalid information through communication technologies such as the internet, television, and social media (Orkan et al., 2020). While recognized as a focal matter in slowing the spread of the disease, and preparing healthcare systems for rapid reaction, the complex and contradictory health information available to most individuals has led the World Health Organization (WHO) to launch platforms to address the COVID-19 infodemic (Abdel-Latif, 2020). Understanding how to manage this is important as there is evidence supporting a relationship between low health literacy and reduced vaccination (Chong et al., 2020).

This study is needed to better understand how healthcare access is influenced by health literacy for patients with limited English proficiency during the COVID-19 pandemic. It has been identified that there is more research needed on the interaction between health literacy and language proficiency (Kim, D. et al., 2017), how nurses can enhance health literacy (Loan et al., 2017), how future actions toward pandemics can be supported by developing health literacy (Abdel-Latif), and how implementations for improving the health of limited English proficient patients can be done through positive means rather than punitive measures (Balakrishnan et al., 2017).

Problem Statement

The specific research problem addressed through this study was to explore the lived experiences of registered nurses caring for LEP patients during the COVID-19 pandemic and how limited health literacy influences access to health care.

Although researchers have investigated this issue, the topic had not been explored in this way. The gap in literature was that the lived experiences of registered nurses had not been explored regarding how health literacy affects healthcare access in LEP patients during a pandemic. This is amenable to scientific study as it addresses possible contributing factors to social health determinants in a vulnerable population. Evaluation of the experiences of registered nurses brings forward new means to improve health literacy as previous authors have demonstrated improvements in healthcare service use in LEP patients when one-to-one navigation services were made available (Uwemedimo & May, 2012). Positive social change can be brought forward from this study by reviewing the experiences of registered nurses during their care of a vulnerable population's healthcare experience. Having these experiences coded and made available to other researchers will contribute to the body of knowledge for LEP patients.

Purpose of the Study

The purpose of this qualitative phenomenological study was to explore the lived experiences of registered nurses caring for LEP patients during the COVID-19 pandemic. Nurses have a unique perspective of the patient experience, and their experiences in caring for LEP patients will bring forward a greater understanding of the influences of health literacy on healthcare access, and how LEP can be a complicating factor in this, especially during a pandemic. The phenomenon of interest was the lived experiences of registered nurses caring for LEP patients during a pandemic, and the effects of health literacy on healthcare access.

Research Question

What are the lived experiences of registered nurses caring for LEP patients during the COVID-19 pandemic?

Theoretical Foundation and Conceptual Frameworks

The theories and concepts that ground this study include Roy's (1991) adaptation model and Orem's (1971) self-care deficit nursing theory (see McEwen & Willis, 2018). Roy's adaptation model (RAM) promotes a premise that individuals have adaptive systems to react to stimuli and there are resultant behaviors which have either positive or negative effects on an individual's well-being. An underlying premise of Orem's self-care deficit nursing theory (SCDNT) is the belief that humans engage in continuous communication and interchange between themselves and their environments to remain alive and to function.

Two additional models are aligned with the problem and were used to help develop research questions: the verbal exchange health literacy (see Harrington et. al, 2014) and the journey to health and well-being (see Rowlands et al., 2017). The verbal exchange health literacy model provides a structured understanding of variables influencing health literacy, a means for interacting with health literacy, and the outcomes of health literacy (Harrington et. al, 2014). The journey to health and well-being model has an individual-focused approach of understanding the health literacy components of contributing, processing, and outcomes toward health and well-being (Rowlands et al., 2017). The logical connections between the framework presented and the nature of my study include exploring registered nurses' experiences in caring for LEP patients who are seeking care in predominantly English proficient healthcare systems that require adaptive processes from both patient and nurse to improve health management needs.

The basic premise of RAM is that an individual or system has adaptive systems (interdependence, physiological, self-concept / group identity, and role function) to stimuli and has resultant behaviors (Jennings, 2017). The problem identified by my study is a possibility that an individual’s health literacy does not support positive and effective adaptive methods, and the nature of a registered nurse’s patient care interaction allows a unique perspective in evaluating these adaptive methods. Using the RAM as a guiding theory helped me structure the study to better explore adaptive methods used by registered nurses in their care of LEP patients to better enhance health literacy and healthcare access.

Orem’s SCDNT aligned with my study in that it provides three nested theories to address the problem of advancement of decreased health care access due to low health literacy which can be influenced by LEP: self-care, self-care deficit, and the nursing system (see Orem et al., 2003). The nature of this study was supported by the SCDNT theory of nursing systems which gives a structured understanding of the need to activate legitimized roles of the nurse and LEP patient for advancement toward positive self-care. A self-care deficit, as described by SCDNT, requires a patient’s nurse to step in with a support modality (Orem et al., 2003). Use of this theory aspect helped to understand the nurse's experiences in trying to support the patient to a better health literacy through one of three steps: total compensation, partial compensation, or education and support (Orem et al., 2003).

These theories supported the construction of open-ended questions by helping to frame the experiences of registered nurses. Using the SCDNT was foundational when designing questions to better reflect a patient's self-care and self-care deficit recognition. Finding the experience of a registered nurse through questions about a patient's healthcare access as related to their health literacy was framed using adaptive processes for the nurse and patient as RAM suggests.

The verbal exchange health literacy and health outcomes model helped me frame the interview questions as it provided three areas to focus on the experiences of nurses in trying to understand influencers of health literacy: patient characteristics, relationship characteristics, and provider/system characteristics (see Harrington et. al, 2014). Health outcomes are displayed as direct results of health decision behaviors and system influences, which are influenced by health navigation, patient resources, and patient psychosocial understanding. Having a reference for the path of health outcomes will support interview questions for gathering the experiences nurses have in caring for LEP patients.

The journey to health and well-being model similarly provided a reference for interview points, yet it allowed for a more individual-focused approach by giving specific means individuals can collect health information (television, internet, talking with doctors) and how individuals live their lives (exercise, social activity, eating habits; see

Rowlands et al., 2017). Having this model to give direction to the interview questions of nurses caring for LEP patients helped support a better understanding of how the individual patient is managing health literacy to gain, process, and apply health care information.

Nature of the Study

To address the research question in this qualitative study, I used a descriptive phenomenology methodology approach to explore and describe a phenomenon of the experiences of registered nurses caring for LEP patients during the COVID-19 pandemic (see Creswell, 2017). Using a descriptive phenomenological approach allowed the richness, breadth, and depth of the registered nurse's experiences to better understand how their LEP patients access healthcare and the possible limitations due to low health literacy (Babbie, 2020). I created 10 interview questions by viewing the phenomenon of interest through the lens of RAM and SCDNT, with structured reference to the verbal exchange health literacy (see Harrington et. al, 2014) and the journey to health and well-being (see Rowlands et al., 2017).

Participant selection began with convenience selection, using known healthcare professionals and interpreters, and transition to snowballing technique to find individuals who would have valuable input for this study (see Ghaljaie et al., 2018). I used snowball sampling to recruit participants. The snowball technique begins by asking an individual who else can be contacted regarding the phenomenon of interest, and then asking that individual who else can be contacted, etcetera; this technique can be effective when a population has information which is valuable for a study yet is not easily identified or does not know they can contribute to the study (Kirchherr & Charles, 2018).

Demographic inclusion for participants was focused on the experiences of registered nurses caring for a vulnerable patient population. Participants were required to have worked in a patient care setting as a registered nurse during 2020 for 3 or more months, and to have cared for patients who could be described by the definition listed below for LEP.

Semistructured interviews were used as a foundation which allows for questions constructed prior to the interview to be expanded upon with additional probing questions (see Burkholder, 2019). I maintained confidentiality of data by assigning alphanumeric codes to participants after an initial screening phone interview. An interview consent form derived from Walden Institutional Review Board (IRB) was emailed to the participant, and this with all digitally obtained information was secured on a password secured laptop. Participants were interviewed remotely due to precaution recommendations by the Centers for Disease Control and Prevention (CDC, 2021) due to the COVID-19 virus. I continued with interviews until I reached data saturation.

Definitions

Barriers to Healthcare: Structural, financial, and cognitive barriers to healthcare access which have a negative influence on individual health and wellbeing (Carrillo et al. 2011).

Determinants of Health: Complex relationships exist within the range of social and economic environment, physical environment, and an individual's characteristics and behaviors which influence individual health status (WHO, 2017). These determinants can be broadly categorized by biology, genetics, individual behavior, social factors, health services, and policy making (Healthy People, 2020a).

Healthcare Access: Healthypeople.gov (Healthy People, 2020b) defined access to health services as the timely use services for personal health which achieves the greatest degree of health outcomes.

Health Disparities: Differences that exist among specific population groups in the attainment of full health potential that can be measured by differences in incidence, prevalence, mortality, burden of disease, and other adverse health conditions (Baciu et al., 2017).

Health Literacy: “The ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others” (CDC, 2021, para. 2).

Language Discordance: When either a patient or provider of healthcare lacks proficiency in the same language (Inagaki et al., 2017).

Limited English Proficiency (LEP): LEP is defined as “individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English can be identified as limited English proficient, or ‘LEP’" (LEP.gov, 2011, p. 1).

Vulnerable Populations: Populations who experience greater risk factors, worse access to care, and increased morbidity and mortality compared with the general population (Joszt, 2018).

Assumptions

The nursing discipline has been ranked as the public's most trusted profession for nearly 2 decades (Gatchel, 2018), and an assumption is that the nurses' interview answers were truthful and reflected their own experiences. An additional assumption was that the concepts of health literacy, healthcare access, and limited English proficiency are somewhat familiar in concept to the participants, even at a rudimentary level. These assumptions were necessary to the study so that the answers provided by the participants are honest and valid.

Scope and Delimitations

A qualitative study was chosen to explore this phenomenon of interest in part because of the onset of the COVID-19 disease. When a complex reality and the meaning of actions in each context is new, and its influence is dynamic and changing, qualitative research can be beneficial to understand the various dimensions of the problem under analysis (Queirós et al., 2017). Additionally, a qualitative study can bring forward nursing experiences in dealing with a specific population group to understand a detailed description of the participant's feelings, opinions, and subjective meaning (Rahman, 2018). A possible benefit of this study's qualitative approach is to facilitate further research into the influence of LEP on health literacy and healthcare access (see Basias & Pollalis, 2018).

Registered nurses were selected as interview participants because of the potential exposure to individual patients, family members, and their interprofessional teams (see Powers, 2019). The selection criteria were intentionally left open to all registered nurses who worked in 2020 to best capture a multifaceted exposure to the experience of caring for LEP patients during the COVID-19 pandemic.

Limitations

There are many roles within the healthcare system and selection of only using registered nurses' experiences was a limitation. Accessibility to participants was a limiting factor as a snowball technique was used in place of a broadcast request for participants. An additional consideration for a limitation was the unknown environment for the participants' working environments and patient care relationships. Smaller sample sizes are a known limitation in qualitative studies, yet the depth of information garnered can be greater due to an exploration of uncertain concepts or variables unknown to the researcher (Basias & Pollalis, 2018).

Significance of the Study

Significance to Practice

In exploring how health literacy is influenced by aspects of LEP, positive social change can be gained from this study by bringing forward nurses' experience of their patient's health care access. This reflected the current practices of healthcare systems to meet the needs and demands of all individuals with healthcare needs, regardless of communication methods. The significance to practice was allowing the nurse's experiences to be brought forward to give a new perspective from the caregivers spending the most time while a patient is receiving health care. It was helpful in providing information as to whether individuals and communities with LEP have the same opportunity for access to beneficial health care services compared to those who have a higher level of English proficiency. This study may provide nurses the opportunity to explore how their peers view the relationship between health literacy and healthcare access when LEP plays a part and have an understandable voice from their peers give identification to problems they may be having, and to see opportunities to resolve unknown problems within the nursing profession. Having these experiences documented and coded for themes will allow for future research opportunities to increase healthcare access and health literacy for individuals and communities.

Significance to Theory

One area of developing focus within my research is the recognition that there are various methods to address language discordance between health providers and patients, regardless of complexity level (microlevel versus macrolevel), yet the question is brought forward as to whether these methods are adequately meeting the needs of individuals and communities. Positive social change can occur from this dissertation research if professional healthcare providers' experiences in caring for patients with LEP relate that the methods are not adequate, and thereby a call for additional assessments of the services provided by health care systems to meet the communication needs of their patients can be met.

Significance to Social Change

At the individual level, a person seeking health care should be able to access available healthcare systems regardless of the preferred language. Access should have a developed means of communicating through the course of their assessment, treatment, education, and continuing into follow-up care (Rubin-Wills, 2012). One of my goals with this study was to determine if the current methods for promoting communication across language discordance are adequate in the medical field. Areas of improvement can be introduced for improvement, creating foundations for increasing the ease of communication for future patients.

At the community level, outreach can be done by entities interested in community health and wellbeing to address the gap with LEP being less likely to seek healthcare (Edward et. al., 2018). Establishing that a problem exists allows for greater application of assessment for communities throughout the United States and generates possibility of future studies to address this topic. Identifying that there is a gap between communities and health care systems will allow further conversation to promote a means for both groups to be receptive to alternate means of outreach and intake.

At the national level, the findings of this study can support the efforts of federally implemented policies, dating from the Civil Rights Act of 1964 and further defined by Executive Order 13166 in 2000, thereby meeting the needs of language discordance between providers and patients, yet also promoting the experiences of healthcare professionals about additional policies needed to ensure equality of health care continuums, especially during times of pandemics (see Ortega, 2018). By revealing areas for improvement which are manageable, feasible and obtainable promote the increased capability of healthcare access to demographic populations who have identified or unidentified needs of improved healthcare management, regardless of their communication methods.

Finding a means to communicate better with patients who have LEP is paramount to assisting in the betterment of an individual's health and by extension a community’s health as well. Determining if communication with an individual is effective is a difficult assessment for any healthcare provider. My study could have a positive social change by presenting a better understanding of how to assess if messages are received by LEP patients. While strengthening communication with individual patients, it is also important to understand how well communication is received by communities. Understanding how to better give health care knowledge to a community will allow the community to better its individuals as well as the general population. Once better health as a broad concept can be improved, true social change will have occurred.

Summary and Transition

In this qualitative study, I explored the lived experiences of registered nurses caring for LEP patients during the COVID-19 pandemic. Documentation by previous authors has shown that health literacy has a direct influence on healthcare access and is itself influenced by LEP. Registered nurses can care for patients and help provide information to broaden their health literacy. Better understanding of how healthcare access is influenced by LEP can be achieved with a qualitative study using semi-structured interviews of registered nurses. Their experiences in combination with a detailed literature review to best understand current authors' findings in other studies will enable the possibility of positive social change for LEP individuals during future pandemics.

Chapter 2 will provide a detailed examination of the existing literature and theoretical foundations used to better understand the experiences of registered nurses caring for limited English proficient patients diagnosed with COVID-19. Key components of Chapter 2 are the search strategies used in the literature review, a detailed review of the current literature, and an exploration of the theories and models which will frame the development of the study.

Chapter 2: Literature Review

Determining the experience of registered nurses during a pandemic requires an increased understanding of several topics they may have encountered which was done through a literature review. To frame this study, two nursing theories were examined, RAM and Orem’s SCDNT, as well as two models to better understand the nurses and patient’s perspectives. I explored the overall understanding of how a registered nurse understands health literacy and ways in which their work is influenced by it. An exploration of the history and research conducted on the concept of health literacy helped establish the term and how it is viewed to influence an individual’s health, as well as what creates and diminishes the effects of health literacy. Having reviewed health literacy, research performed on language concordance and LEP was also reviewed to better understand how these aspects interact with registered nurses and health literacy.

Literature Search Strategy

Key words and database searches used were Google Scholar, CINAHL and MEDLINE Combined Search, and Embase. Keywords searches were *health literacy, healthcare access, limited English proficiency, LEP, COVID-19, language discordance,* and *barriers to healthcare.* The year range for database searches was since 2016 (5 years prior). All articles and studies brought forward in this dissertation are from peer reviewed journals.

Theoretical Foundation and Conceptual Frameworks

Roy's Adaptation Model

RAM is based on Bertalanffy's general systems theory and Helson's adaptation theory (Callis, 2020). Recognizing the need to adjust applications of theory due to cultural diversity, Roy enhanced the relevance and effectiveness of those theories, and continued to augment her own theory and defined nursing to increase compliance and life expectancy (Callis, 2020). Roy originated the concept of *veritivity* to capture the concept of an innate human characteristic that is of creative and purposeful drive for common good, supporting the dignity of all groups of individuals (Callis, 2020). Individuals or groups are viewed as systems with components that continually interact with stimuli through coping processes and there are then resultant adaptive responses. Thus, the primary concepts are stimuli, coping processes, and adaptive responses (Callis, 2020). Coping processes are mediators between the stimuli and adaptive modes (Callis, 2020).

One of the strengths of RAM is the application to not only individuals, but also groups of individuals. Callus (2020) viewed nurses as an adaptive system as they interact in caring for groups of individuals themselves. Nurses as a professional group have needs, and possess holistic characteristics such as shared responsibilities, goals, ethics, normative behaviors, and moral statutes (Callis, 2020). Stimuli for nursing staff can be as simple as management of a critical patient, or as complicated as ethical dilemmas imposed by conflicting interests of advocating for patients and following physician orders (Callis, 2020). Coping processes include regulator systems in which groups react in similar biological ways, such as nurses reacting to stress with increased cortisol levels leading to adrenal fatigue which places the group at risk for exhaustion and adaptive processes that can be assigned three levels: integrated, compensatory, and compromised (Callis, 2020). Further, integrated responses use multiple resources to positively manage stimuli and compensatory adaptations leave the individual or group susceptible to negative influences such as physiological discomfort or pain (Callis, 2020). Compromised adaptive processes occur in a negative fashion, such as when a group of nurses experience mental exhaustion resulting in increased absences or permanently leaving places of employment or the nursing profession (Callis, 2020). RAM gives a structured understanding of how an individual, grouping or entity reacts to stimuli by using coping mechanisms with resultant behaviors.

The Self-Care Deficit Nursing Theory

Orem’s (1971) SCDNT supports an individual’s management and actions aimed at maintaining and improving their life, health, and well-being without the supervision of health professionals (Zhizhpon-Quinde et al., 2021). Chipu and Downing (2020) described the concept of self-care as defined as a purposeful act often initiated and performed by an individual on their own to care for oneself without consulting a medical professional or receiving other assistance. They note that pandemics can complicate self-care as the information needed to lead a healthy lifestyle can come through confusing mediums such as social media, broadcast networks, attempts at self-education through internet searches and other examples of infodemic management. The necessary antecedent skills they describe for self-care are self-motivation, mobilization of resources, religious and cultural beliefs, social spiritual and professional support, and availability of time. The positive consequences of self-care include maintenance of health and well-being, the ability to reach autonomy, increase self-esteem, disease prevention and empowerment, increase social support, and the ability to cope with stress. The resultant ability to engage in self-care to meet the requirements for human functioning and development is known as self-care agency.

Leao et al. (2017) found that nurses were less likely to practice self-care for themselves while still supporting and promoting self-care for their patients. Orem's SCDNT helps nursing professionals in developing education and research aspects when they need to help individuals develop their own autonomy (Zhizhpon-Quinde et al., 2021). This development of research methods and patient education allows nurses to assist patients to identify the deficit in their healthcare management to return to an autonomous state which does not require support by healthcare professionals (Asmundson & Taylor, 2020). As the COVID-19 pandemic has created self-care deficits, noted by increased hospital cases, nursing thereby plays an indispensable role in promoting self-care and biosecurity measures towards prevention of this disease for individuals, families, and their communities (Zhizhpon-Quinde et al., 2021).

The Verbal Exchange Health Literacy

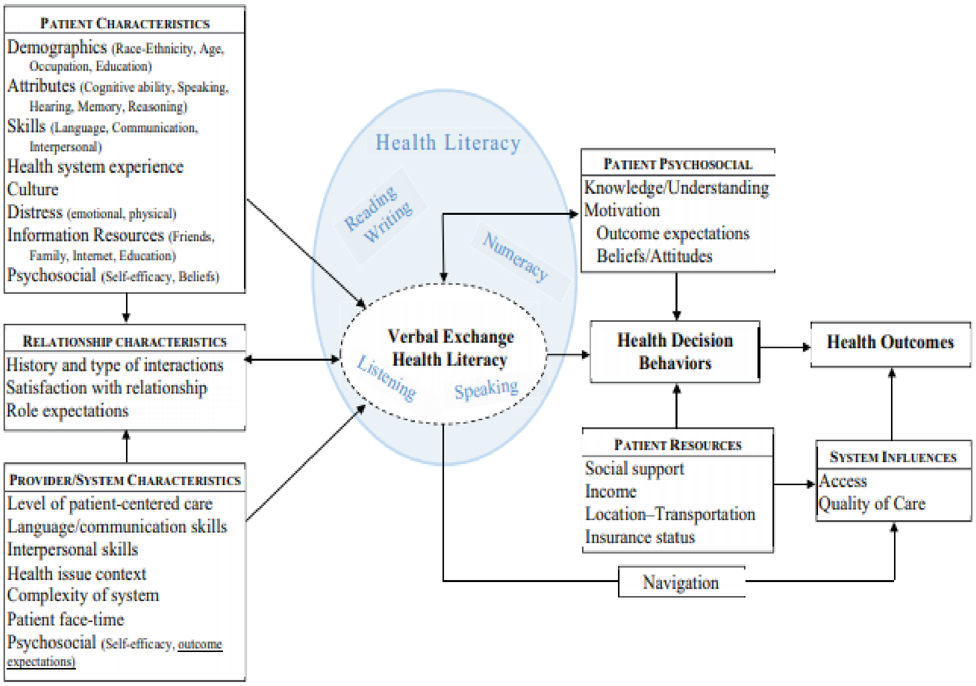
The verbal exchange health literacy (VEHL), (see Figure 1) was designed from a qualitative study of focus groups with the purpose to address variability in a patient's verbal exchange health literacy based on context, health problem, and healthcare provider (Harrington et. al, 2014). They acknowledged that healthcare tasks vary in difficulty by illness or preventative behavior, as does the required ability to understand and successfully implement positive behaviors. Additionally, it was recognized that variability in health decisions and resulting outcomes are subject to external factors influencing their understanding, implementation, and follow through. The proposed definition by the researchers for VEHL is the ability to speak and listen in a way that facilitates the exchanging, understanding, and interpreting of healthcare information needed for decision making, disease management, and the navigation of the healthcare system (Harrington et. al, 2014).

The authors of the VEHL considered patient influences such as resources which can include internet skills, comfort in asking questions, knowing people in the healthcare field, as well as previous experiences with healthcare systems and providers (Harrington et. al, 2014). Providers/systems also have an influence on the VEHL in terms of the provider's ability to communicate in a relatable level of language, interpersonal skills, system complexity, amount of patient face time, and the degree to which they recognize the possibility of gaps in VEHL for themselves.

The overall degree of health literacy for a patient is composed of influences of patient characteristics, relationship characteristics, provider/system characteristics, patient psychosocial and resources, system influences and ease of navigation (Harrington et. al, 2014). These all contribute directly to health outcomes, or health decision behaviors which influence health outcomes. Use of the VEHL for this study was necessary as it helped me connect the importance of the individual's influence on their health literacy, but also that of the nurses caring for them. Having this cooperative view of patient health literacy helped frame the interview questions and conversations to allow for a deeper understanding of the factors which may have influence on the nurse's patients.

Figure 1

The Verbal Exchange Health Literacy (VEHL)

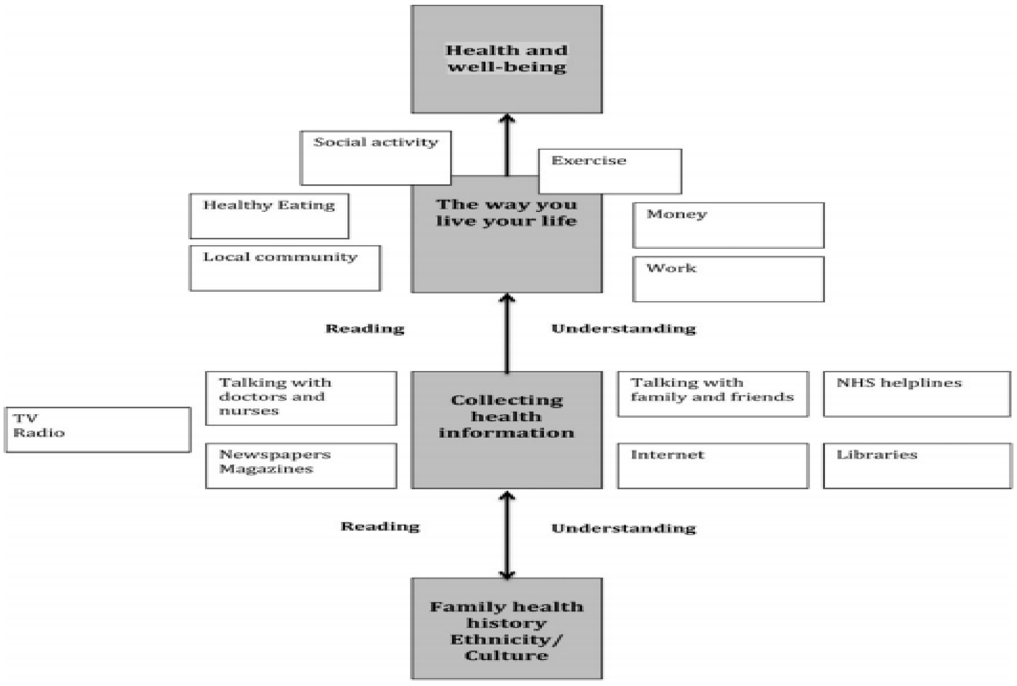


The Journey to Health and Well-Being Model

The journey to health and well-being model (see Figure 2) was also based on qualitative research and uses four stages to construct a pathway to health and well-being: genetic make-up and culture, accurate acquisition of health information, decision to alter behavior, and resultant health and well-being (Rowlands et al., 2017). I chose to use the journey to health and well-being model to acknowledge the complexities of information gathering, discernment of validity and applicability to the individual, capabilities of ability to make lifestyle changes based on resources and influences in the individual's life, and the resultant health and well-being stage. The progression begins with a lessened degree of an individual’s control and progresses through stages in which they have increasing capability to make changes in their health and well-being (Rowlands et al., 2017). Using this model as a framework for understanding nurses' experiences in caring with patients with LEP helped me better understand some of the influencing factors towards their communication regarding the COVID-19 pandemic. Additionally, it allowed for understanding of difficulties individuals face in trying to obtain, understand, and use resources regarding better health and well-being.

Figure 2

The Journey to Health and Wellness Model



Unique Perspective of Registered Nurses.

Nurses have been found to put the well-being of vulnerable populations before their own self-interests (Chipu & Downing, 2020). In addition to providing safe and effective care to their patients, nurses have a unique communication experience with patients as part of their role is to seek ways to positively influence patient health and well-being through patient centered care (Ali & Johnson, 2016). Nurses also provide the most direct contact with patients and their families (Coleman & Acosta, 2017). Unlike other health providers who may focus on a specific procedure, complaint, injury, illness or need, part of the nursing role is to evaluate the patient as a whole and this can be complicated by language discordance (Galinato et al., 2016). Galinato et al. (2016) also found in a qualitative study focused on nurse experiences in caring with LEP patients that language barriers created unique complexities when communicating with LEP patients. This was exasperated with nurses reporting difficulty in determining the patient's level of English proficiency (Galatino et al., 2016). Difficulties in nursing care include inability to communicate the importance of call light usage for signaling a need for assistance, mobility needs, pain control and fall prevention (Galatino et al., 2016). One of rhe roles of registered nurses is communicate with patients to positively influence their health and well-being, and their influence on the patient's health is complicated by language discordance.

Registered Nurses' Role

Nurses can influence health literacy as they are often the first point of care, employed across many areas of the healthcare continuum, and are leaders in healthcare organizations (Loan et al., 2017). However, nurses are not likely consulted for development and review of language and interpretation policies (Ali & Johnson, 2016). Nurses need to be included in discussions on policies that affect patients. By collecting nurses' perceptions and identifying common themes, my study may help show the importance of including nurses' input.

While health literacy has been identified as an area for improvement, it is not well understood by clinicians, superficially addressed by healthcare systems, and is not universally executed across all healthcare domains (Loan et al., 2017). An identified nursing role is to assure health literacy assessments are applied in a universal manner to maximize health outcomes through patient empowerment, engagement, and activation (Loan et al., 2017). Promotions of tools such as the health literacy universal precaution toolkit, endorsed by the Agency for Healthcare Research and Quality (AHRQ) and Institute for Healthcare Improvement (IHI; Brega et al., 2015), can be used to check assumptions that patients may have difficulty understanding health information and accessing health Services (Loan et al., 2017). These evidence-based resources support nurses as they help their patients understand health information, reduce the complexity of healthcare, and provide support regardless of the patient's health literacy level (Brega et al., 2015). Healthcare professionals play a vital role in providing healthcare information, and overlooking this responsibility aggravates the influence of low health literacy among vulnerable populations and magnifies health inequities (Nesari et al., 2019).

Nursing Influence on Patient Health Literacy

Language is the medium for interpersonal communication and is the foundation for nurse-patient relationships (Coleman & Acosta, 2017). When interacting with healthcare professionals who do not offer written and oral communications at an appropriate health literacy level, patients with low health literacy face challenges that may limit their ability to engage with healthcare services, leading to poor health outcomes and costly healthcare management (Nesari et al., 2019). Galantino et al. (2016) reported nurses acknowledged their LEP patients may not have received the same quality of care as English proficient patients, due in part to several reasons: difficulty in communicating the importance of using a call light system and perceived decreased use, limited availability of in-person translators, perception of interpreter phones being cumbersome, limitations of visual aids due to patient vision and disease process.

Adaptation to Create Positive Health.

Nurses are frequently faced with accomplishing tasks which have barriers requiring informal practices and employ workarounds (Van der Veen et al., 2020). Workarounds are defined by Kobayashi et al. (2005) as informal practices to handle exceptions to established workflows. These methods for meeting the workflow needs of their daily operations are an example of adaptation processes employed as denoted by RAM (Jennings, 2017). Nurses who reported using ad hoc methods for communicating with LEP patients, such as creating flashcards with pictures, using Google Translator, charades, and using family members as interpreters are examples of adaptation methods employed by nurses in their care for LEP patients (Galinato et al., 2016). Researchers found use of family members to act as translators to be over 49% (White et al., 2018). Using bilingual nurses who are not trained as translators but have knowledge of more than one language is another example of adaptation to meeting the needs of language discordance. Nurses reported encouragement from patients, and their family's positive response, to continue using this practice despite nurses feeling an additional workload and operating outside of organizational policies (Ali & Johnson, 2016). According to Ali and Johnson (2016), most nurses reported having little knowledge of their organization's language and interpretation policies. Nurses from Ali and Johnson's study believed that they were not allowed to speak to their patients in their language when required and this skill was not encouraged by the organization's management. Following a mixed-method study, White et al. (2018) determined that to optimize care for LEP patients, it was important to provide opportunities for LEP patients to access care from health care providers who speak the same language. Use of translator services improved care; however, it was determined that the quality of provider-patient communication was less than optimal or readily available (White et al., 2018). White et al. (2018) promoted the use, training, and recruitment of bilingual staff to meet the health care needs of the patient population served. Bilingual staff can be particularly effective in assessing rare languages and dialects as well as being readily available for brief interactions between staff and patients (White et al., 2018).

Limited English Proficiency (LEP)

The 2010 U.S. Census reports that more than 20.1% of the U.S. population, 55 million persons, speak a language other than English at home and 8.6% are limited

English proficient. The primary languages of these 25.1 million LEP individuals are Spanish, Chinese, Vietnamese, Korean, and Tagalog (Zong & Batalova, 2015; Diamond et al, 2020). Health organizations in the United States are federally mandated to provide language appropriate health services for not only these five languages, but for any language preference of the patients they provide services through Executive Order 13166 (Ortega, et al., 2020). Signed on August 11, 2000, Executive Order 13166 requires U.S. federal agencies to examine the services they provide, identify any need for services to individuals with LEP, and develop and implement systems to provide those services so LEP individuals can have ease of meaningful engagement with those services (Executive Order 13166, 2000). The Executive Order also requires federal agencies to ensure any recipients of financial assistance equally provide meaningful access to their LEP applicants and beneficiaries (Executive Order 13166, 2000). Compliance standards are outlined in the U.S. Department of Justice (DOJ) Policy Guidance Document, Enforcement of Title VI of the Civil Rights Act of 1964 - National Origin Discrimination Against Persons With Limited English Proficiency (Enforcement of Title VI, 2000). This LEP Guidance establishes the compliance standards that all federal financial assistance recipients are required to follow, which includes Medicaid and Medicare (Executive Order 13166, 2000). One noted effect of language discordance is the difficulties in managing health insurance, which is complicated in many ways such as by individuals trying to access state exchange healthcare marketplaces (such as the Massachusetts Health Connector) where information and instructions are predominantly written in English (Edward et al., 2018).

The Affordable Care Act (ACA), signed into law in 2010, was designed to reduce the cost of health insurance coverage, and included provisions requiring all insurers which serve counties with large LEP populations to provide health insurance documents with translations for those populations (Berhahl & Kirny, 2018). Many of the programs outlined in the ACA aimed at assisting populations which are poor and which face healthcare access barriers would benefit LEP individuals who are disproportionately represented in these groupings (Berhahl & Kirny, 2018). Interventions of the ACA aimed at increasing health literacy were targeted to improve patient-physician communications by increasing funding for training and outreach (Berhahl & Kirny, 2018). Workforce grants provided incentives for healthcare professionals serving marginalized populations to improve culturally and linguistically appropriate care (Berhahl & Kirny, 2018).

Benefits of Language Concordance

Benefits of language concordance have been reported in the past and include better physician-provider relationships, treatment compliance, patient satisfaction, and decreased emergency department visits and cost of care, improved patient experience, increased patient comfort, and enhancement of satisfaction with healthcare services (Ali & Johnson, 2016). Parker et al. (2017) found a significant improvement in glycemic and LDL control in patients who changed to providers who were language concordant. Patients of LEP families were more likely to be transferred to an Intensive Care Unit (ICU) within 24 hours of hospital admission than patients with families who had language concordance (Hartford et al. 2019). Effective communication of needs and a higher level of trust are also associated with language concordance (Ali & Johnson, 2016).

Effects of LEP

Language discordance has multiple negative influences documented in the health environment that contribute to increased emergency department visits, longer hospital stays, increased readmission rates, delayed diagnoses, increased medication errors, and lower patient satisfaction survey scores (Coleman & Angosta, 2017). Ortega (2018) notes increased opportunities for medical errors, patient dissatisfaction, inability to access needed services, and diminished glycemic control for diabetic patients. Patients with LEP who underwent radiation therapy for head and neck cancer were less likely to undergo chemoradiation (60% vs 84%) (Franco et al., 2020). Positive COVID-19 test rates were much higher for LEP patients (26%) compared to patients with English as a primary language (6%) (Wilkins, et al., 2021).

A study by Berhahl and Kirny (2018) discussed several aspects of the negative influences of LEP in regards to health literacy and the patient experience. One aspect brought forward was that although LEP individuals evaluated were immigrant, non-white, and low-income, the negative impacts of LEP were independent of these factors and is often a mediator of disparities (Berhahl & Kirny, 2018). The focus of their study was on the interventions of the ACA of 2010 to improve patient physician communication, aimed at increasing access and use of healthcare system options for historically marginalized groups, including LEP individuals (Berhahl & Kirny, 2018).

They found LEP patients who responded that physicians explained things clearly were on a downward trend pre-ACA, 58% in 2006 to 51% in 2010 (Berhahl & Kirny, 2018). After the ACA, this trend reversed and by 2015 had risen to 58% again (Berhahl & Kirny, 2018). Similar perceptions of whether physicians always listened carefully declined pre-ACA, 63% in 2006 to 49% in 2010, and by 2015 had increased to 61% (Berhahl & Kirny, 2018). Similarly, LEP patients reported physicians showing respect was on a decline pre-ACA, 66% to 54%, and increased after the ACA to 67% in 2015 (Berhahl & Kirny, 2018). Improving patient-physician communication is a continued important and complex problem despite policies implemented to equalize the LEP and English proficient patient experience (Berhahl & Kirny, 2018).

Attempts to Meet Language Discordance Needs

Galinato et al. (2016) reported nurses had difficulty determining the language preference for non-English speaking patients which led to problems determining the appropriate translator medium. Language discordance challenges many dimensions of health care systems to provide ease of meaningful engagement for all patients seeking services, including patient experience, equity, access, patient safety, and cost (Ortega, 2018). To match these challenges, nurses consistently engage with interpretive devices and tools, and health technology can increase convenience (Galinato et al., 2016). Utilization of on-on-one health system management navigation services have been shown to change the trend of LEP families, identified as the highest risk of being lost in healthcare follow-up, to more likely utilize available resources (Uwemedimo & May, 2018).

Physicians taking part in mixed-method studies reported taking the path of least resistance when obtaining patient medical histories (White et al., 2018). Due to the routine nature of many patient physician interactions, e.g. need for antibiotics and routine blood tests, when any uncertainty in communication with LEP patients the physicians would resort to alternative activities such as investigating the patient’s chart to verify information and inferring information from tests and other empirical data (White et al., 2018). All physicians taking part in the study reported they had grown accustomed to not knowing the full story of the patient’s presentation and history. One large disadvantage of professional interpreter utilization was described by the researchers as a communication drought broken by a flood. This expression was a coding for physicians reporting that they spent less time with LEP patients in comparison to English speaking patients and that they saved their information for when a meeting with a professional translator was made. Therefore, the patients received all their information in a single setting, possibly from multiple clinicians representing multiple services, e.g. surgical and anesthesia, discharge instructions including pharmacy and wound care. All the physicians interviewed for the study reported concern whether patients could retain the large amounts of information provided so quickly and in such a brevity of time. In contrast, English proficient patients received the same information pieces several times throughout the day. The researcher’s findings in this study where additional tests were ordered for LEP patients, found that family members were frequently engaged for translation services, although there was lack of communication on a regular basis or not directly to the patient, or providing a large volume of information in a short space of time. There was also an acknowledgement that the care delivered to English proficient patients was different from care given to LEP patients (White et al., 2018).

Health Literacy

Health literacy is derived from the umbrella term literacy, which is the ability for an individual to engage with a medium to acquire, construct and communicate meaning (Kim, D. et al., 2020). A complex group of skills are necessary for maintaining and improving health literacy and include the ability to understand visual information such as graphs and diagrams, interact with computers, obtain and apply relevant information, calculate and reason numerically (National Library of Medicine, 2020). Application of these skills to health situations can include reading and comprehending instructions on pill bottles, appointment slips, brochures regarding specific and general health conditions, consent forms, as well as managing esoteric terminology and engaging with an increasingly complicated health care system (National Library of Medicine, 2020). Limited health literacy includes difficulty with reading, calculations, oral communications, new learning, and carrying out medical instructions (Perez-Stable & El-Toukhy, 2018).

In the 1970s multiple tools were created to measure health literacy, however researchers found that simply introducing assessment tools and providing health information was not helping to increase individual health literacy levels (Kim, W. et al., 2020). Subsequent researchers reported most health initiatives had success in raising health literacy levels for individuals of higher economic status with previous exposure to higher levels of education. An “inverse health law” describes individuals who would likely benefit from lifestyle intervention changes yet are the least likely to engage those changes (Dixon & Ornish, 2021). A variety of reasons contribute to this including lack of knowledge, health literacy, resources, or simply not realizing the priority of long-term implications of current day activities, especially for those living in difficult situations (Dixon & Ornish, 2021). They further noted that additional factors have been identified such as determinants of health: economic, environmental, social conditions, and various governmental policies (Kim, W. et al., 2020). Despite identifications and initiative, in 2003, the National Assessment of Adult Literacy (NAAL) estimated 36% of the U.S. population, 81 million individuals, had low health literacy.

Factors Influencing Health Literacy

Health literacy has been recognized as a social determinant of health based on its impact on healthcare access and health outcomes (Loan, 2017). This link between low health literacy is prevalent in several associations including individuals with less education, unmarried, without car or home ownership (Berkman et al., 2011; Rosenbaum et al., 2015; Scarpato et al., 2016; Taylor et al., 2016), elderly and lower socio-economic status (Koster et al., 2017; Berkman et al., 2011), male gender (Miller-Materno et al., 2015), speaking another language before starting school (Berkman et al., 2011) and in populations with chronic health conditions (Schaeffer et al., 2017; Logan et al., 2015; Berkman et al., 2011).

Researchers evaluating the 2003 NAAL found individuals in the elderly group (65 years and older) scored 59% at the low health level compared to 36% of the total population (Kutner et al., 2006). More than three-quarters of the participants, 76%, who had not completed high school scored at low health literacy, compared to 13% of participants with a four-year college degree (Kutner et al., 2006).

Health literacy is an international concern. Comparative studies of the Health Literacy Survey Germany in 2014 (HLS-GER) and 2020 (HLS-GER2) found consistent low health literacy levels among individuals with low educational level, low social status, migration experience, older people, and people living with chronic illness or long-term (Schaeffer et al., 2021). Individuals with personal migration experiences have a significantly higher proportion of low health literacy than individuals with only parental migration experience (Schaeffer et al., 2021).

What Health Literacy Influences

Authors studying the relationship between low health literacy and major abdominal surgery found an increased length of stay, but not with postoperative 30-day emergency department visits or 90-day hospital readmissions (Wright et al., 2018). Low health literacy patients undergoing urologic procedures were found to correlate with higher minor postoperative complications at 30 days and higher pathological and biopsy staging (Scarpato et al., 2016). Breast reconstruction rates were found to be lower in patients with low health literacy (Winton et al. 2016). It was also a predictor of listing for kidney transplantation (Kazley et al., 2014). Poor treatment compliance with surgery patients has also been associated with low health literacy (Turkoglu et al., 2019; Tang et al., 2017). Compliance with medications in surgical patients, especially noteworthy for those receiving transplants, low health literacy has shown to have profound implications on graft rejection and loss (Patzer et al., 2016; Serper et al., 2015). Authors reviewing the effectiveness of literacy assessment tools have found that more than a third of surgical patients exhibited low health literacy (Chang et al. 2020). Lower utilization of preventative health services and lower adherence to medications and treatments have a negative impact on the U.S. healthcare system (Kim, D. et al., 2020). In 2007, Weiss found that the average annual health care costs for individuals with low health literacy was four times higher than individuals with high health literacy ($13,000 compared to $3,000). The National Institute of Health and Friedlings modeling assumptions estimate the economic effect of low health literacy is $1.6 to $3.6 trillion due to medical complications and readmissions (Kim, D. et al., 2020).

Negative consequences associated with low health literacy include decreased physical activity, diets which are unhealthy, increased obesity rates, poorer self-perceived health, and more intensive use of their health system such as increased hospitalizations and use of emergency services (Schaeffer et al. 2021). Absenteeism from work, 6 days or more over 12 months, was reported in 35.4% of excellent health literacy respondents compared to 49.6% of respondents with low health literacy (Schaeffer et al., 2021). Frequency of practitioner visits were twice as high for individuals with low health literacy (13.6%) as those with excellent health literacy (27.8%), rated as 6 or more contacts in 12 months (Schaeffer et al., 2021)

Dixon and Ornish (2021) found that 93% of type 2 diabetes is preventable. In a 2018 large-scale study, individuals with five positive healthy lifestyle habits (diet, smoking, physical activity, alcohol consumption, and BMI) had an 82% lower risk of dying from cardiovascular disease and 65% lower chance of dying from cancer (Pi et al.

2018). The European Prospective Investigation into Cancer and Nutrition (EPIC) study found individuals with four defined healthy lifestyle choices (exercising 30 minutes per day, not smoking, normal weight, and high intake of fruits, vegetables, and whole grains) had 78% lower risk of developing any chronic diseases, 93% lower risk of diabetes type 2, 81% reduced risk of heart attack, 50% lower risk of a stroke, and 36% reduction of cancer (Gonzalez, 2006). Additionally, individuals who never smoked, were not overweight, had 30 minutes of exercise every day, limited alcohol intake, and reported diets high in fruits and vegetables lived 12-14 years longer than comparative groups (Pi et al., 2018).

Enhancing understanding of health information, and health literacy, provides a greater opportunity for access and use of healthcare services (Nesari et al., 2019). Edward et al. (2018) noted LEP individuals with adequate health literacy were shown to have higher access to healthcare within the previous year, 60%, compared to individuals with low health literacy, 42%. This includes the understanding and applying of health information to navigate healthcare systems, making informed decisions, and being an active agent in shaping an individual health plan, and is influenced not only by an individual's cognitive capacity, but also healthcare systems complexities and the quality of health communications (Nesari et al., 2019).

Low health literacy is associated with increased risk for emergency care, poor adherence to medication regimes, and higher mortality rates (Chang et al. 2020). Providers and health systems which do not account for the influence of low health literacy increase the risk of poor healthcare management of the patient (Chang et al., 2020.)

Poor patient-physician communication due to low health literacy levels can lead patients to feel embarrassed, perceive intimidation, lessen engagement in healthcare, increase provider distrust, and diminish understanding of physician instructions (Kim, W. et al., 2020). Patient physician communication disparities can have two components: patient factors to include language proficiency and health literacy; physician factors to include cultural competency, communication skills, and unconscious bias (Perez-Stable & ElToukhy, 2018). Perceived discrimination is associated with lower quality patient-physician communication (Berhahl & Kirny, 2018). Researchers have documented better health outcomes, medical adherence, and patient satisfaction with care when higher quality patient-physician communication is present (Perez-Stable & ElToukhy, 2018). Translation services greatly enhance patient-physician communication when language discordance is present and are federally required to be available to all patients, yet are considered less than effective than language concordant medical care (Ortega, 2018).

Health Care Access

In a qualitative study, participants with adequate health literacy were 43% more likely to have reported accessing healthcare in the previous year (Edward, et al. 2018). Having health insurance is a strong influencer on health care access, with 70% of participants who had insurance reporting having accessed health care within the previous year, a strong contrast to only 22% of uninsured participants reporting the same (Edward et al., 2018). Difficulties regarding understanding health access, including a general lack of knowledge around healthcare policies, health insurance and related terminology resulting in insufficient narrative for an in-depth analysis of patients trying to manage the healthcare system (Edwards et al., 2018). As an example of this, the participants Edward et al. (2018) studied were unable to express a knowledge of the definition of either a premium, deductible, or copay.

Evaluations of barriers in accessing healthcare are complicated, however participants have reported emergent and delayed health seeking behaviors, the experiences of being an immigrant, language discordance, communication difficulties, and affordability (Edward et al., 2018). Information overload for LEP patients has been reported in studies when translator services are utilized with low frequency, leading to a large amount of information being conveyed in a short period of time (White et al., 2018). Immigrant populations (and second-generation residents) also have been reported to avoid healthcare institutions in response to major shift in immigration policies due to fear of discrimination due to national origin (Berhahl & Kirny, 2018).

COVID-19 Pandemic

At this writing, the WHO still has the 2019 coronavirus disease (COVID-19) listed as a pandemic (WHO, 2021). A pandemic is defined as an epidemic occurring worldwide, affecting large numbers of people across international borders, due to a contagious disease that is not of seasonal nature (Porta, 2008). The first wave of COVID-19 cases was identified in Wuhan, China, in December of 2019 (WHO, 2021). The WHO declared the then identified novel coronavirus a ‘public health emergency of International concern’ (PHEIC) on January 31, 2020 (WHO-2, 2020). On February 11, 2020, it was named COVID-19 by the WHO, following international guidelines established in 2015 which suggested the use of scientific terminology for disease specification rather than geographical, national, or political etymology (Adhanom, 2020). On February 24, 2020, a WHO spokesperson clarified there was no official category for a pandemic, a term used from a previous classification system (Nebehay, 2020), yet on March 11, 2020 the WHO Director General declared COVID-19 a pandemic (WHO, 2020). The United States declared a national emergency on March 13, 2020, to combat the pandemic caused by COVID-19 (Hartnett et al., 2020).

The wave of information inundating media outlets regarding the new pandemic became referred to as an infodemic, a term originating in the 2002 SARS outbreak (Shah et al., 2021). Conflicting information, mixed messages from organizations, lack of factual and evidenced based information, and the overall sheer volume of continuous information created anxiety and uncertainty regarding best practices for prevention and control of COVID-19 (Shah et al., 2021). Subsequent restrictions on social and business activity, such as mask wearing, six-foot distancing from other individuals, hand washing practices, not touching one’s face with hands, were distressing for many and took a particular toll on patients with low health literacy and limited English proficiency (Franco et al., 2020). Further aggravating the spread of disease, structural inequities were accentuated by the pandemic as counties in the United States with higher LEP populations developed significantly higher COVID-19 mortality rates (Fielding-Miller et al., 2020).

Health literacy became an international focus as researchers began reporting individuals with inadequate health literacy versus individuals with adequate health literacy were having statistically significant differences in understanding COVID-19 symptoms (49% vs. 68%), less able to identify prevention behaviors (59% vs 72%), experienced difficulty finding and understanding government messaging, rating social distancing as unimportant, and more likely to endorse misinformed beliefs regarding COVID-19 and vaccinations (McCaffery, 2020). Authors reviewing the The Health Literacy Studies in Germany, conducted in 2014 (HLS-GER) and 2020 (HLS-GER2), brought forward that health literacy was found to increase by three percentage points previous to and in the midst of the COVID-19 pandemic (Schaeffer et al., 2021).

The importance of health literacy as a tool to combat the spread of COVID-19 was identified early in this pandemic (Abdel-Latif, 2020, Paakkari & Okan, 2020). As of this writing, it remains an identifiable means of COVID-19 awareness, preventative behavior, and chronic pharmaceutical management (Gautam et al., 2020). Higher levels of health literacy are correlated with individual's acceptance of preventative measures such as vaccination (Montagni et al., 2021).

Due to the present condition of evolution of this pandemic at this writing, it cannot be determined at which stage or to what extent it is in. Progression of this pandemic has been exponential, and predictions of its current state or future possibilities are at this point in time not possible.

Summary and Conclusions

Previous studies have brought forward the importance of many aspects of this study's phenomenon of interest. Examining the nursing perspective through the lens of two nursing theories allows a better understanding of how to address choices made by individuals in their management of an evolving situation such as the COVID-19 pandemic. It also brings forward the importance of the role of registered nurses, as well as their strengths and limitations. Dealing with health literacy for many nurses is difficult due to a multitude of complicating factors, most notable the identification by authors who show that experienced nurses had more difficulty assessing the degree of a patient's health literacy. Higher levels of health literacy have been shown by multiple authors to have positive effects on patient's lives, and conversely lower levels of health literacy have negative effects on patient's health. These factors are greatly complicated when extenuating circumstances such as pandemics are introduced as another mitigating factor which patients must learn to cope with, especially when information is so abundant and without scientific relevance.

Chapter 3: Research Method

To better understand the experiences of registered nurses who cared for LEP patients during the COVID-19 pandemic, I conducted a qualitative phenomenological study. This chapter detailed the rationale for its design, discuss methodologies, and review the means for data collection and coding. Sound research methodology is key to ensuring a study can be transferred to other contexts, uses methods to ensure data is pertinent and valid, can be repeated by future scientists, and maintains sound ethical practices.

Research Design and Rationale

The phenomenon of interest for this study was the lived experiences of registered nurses when caring for LEP patients and how LEP influences health literacy and healthcare access. To help explore the phenomenon of interest and help guide this study, the following research question was developed: “What are the lived experiences of registered nurses caring for LEP patients during the COVID-19 pandemic?”

I chose a qualitative study design to research this question. Unlike quantitative studies, in which measurable analysis is performed on independent and dependent variables, qualitative studies can be performed when variables are unknown to the researcher (Merriam & Tisdell, 2016). Qualitative research is an iterative process wherein an improved understanding is achieved by making distinctions of the phenomenon (Aspers & Corte, 2019). It is achieved through the process of collecting nonnumerical data and using a method to analyze the data to better understand or identify concepts

(Clark & Veale, 2018). Qualitative studies can be used to better understand complex realities and the meaning of actions within a defined context (Querios et al., 2017).

A descriptive phenomenology methodology was used in this qualitative study to explore this phenomenon. Phenomenology seeks to understand individuals' everyday lives by revealing their lived experiences (Shahgholian & Yousefi, 2018). The interest of phenomenology is how phenomena presents to the consciousness of individuals, or how they appear to people in their experience; explanation of this process is a descriptive task (Giorgi & Giorgi, 2012). I chose descriptive phenomenology as it emphasizes a pure description of individuals' experiences (see Matua et al., 2018) and was an appropriate choice for this research question to describe the lived experiences of registered nurses in caring for LEP patients during the COVID-19 pandemic.

Role of the Researcher

My role as the researcher in this qualitative study was to communicate with participants and bring forward their experiences in a manner which does introduce bias. For this to occur, it is important to recognize that bias can occur at any point in the research including participant recruitment, conducting the interviews, transcribing interviews, and development of codes and themes. Ensuring that researcher bias is minimized to the greatest degree can be achieved through several methods.

Bracketing is an effective method for a researcher to actively mitigate preconceptions during the research process (Burkholder et al. 2019). One of the first steps towards this is to acknowledge that all researchers will likely have some preconception about the phenomenon of interest they are studying. A self-reflection for this was easily performed using techniques such as journaling, mind mapping, and creating lists to recognize personal assumptions (see Burkholder et al. 2019). Bracketing consisted of using these techniques throughout the research process to recognize unintended bias, preconceptions, and development of opinions regarding the research data (see Burkholder et al. 2019). Objectivity was the goal toward finding what the experience of registered nurses is like when caring for LEP patients diagnosed with COVID-19. Bracketing is essential to continue throughout the process to obtain an unbiased view of these experiences and to collect data that is as free from researcher influence as possible (Burkholder et al. 2019).

Methodology

Population and Participant Selection Logic

Selection of participants for this study was made with the intent to identify individuals who had experience in caring for LEP patients as they engaged with healthcare during a pandemic. Registered nurses provide care for patients in all settings within the healthcare continuum; thus, using the experiences of registered nurses in caring for LEP patients to better understand the phenomenon of interest led to a decision to embrace diversity of the population for this study. The inclusion criteria was open to registered nurses working 3 or more months in 2020. I chose 2020 because the WHO declared a public health emergency of international concern for the COVID-19 virus on January 30, 2020, and then declared it a pandemic on March 11th, 2020 (WHO, 2020). Nurses who worked any 3 months of 2020 would be able to contribute to the situation for COVID-19, either preevent or intraevent.

Participants were recruited through convenience selection of known individuals throughout healthcare facilities in the region of interest and transitioned to snowballing technique (see Ghaljaie et al., 2018). Sample size was based on a systematic review of qualitative health research which a minimum interview saturation was found to be between seven and 19 interviews, and the sample size increased as needed until saturation occurs (see Vasileiou et al., 2018).

Having a wide diversity of registered nurses' experiences allowed a greater understanding of how LEP patients are navigating the healthcare system during the COVID-19 pandemic. Keeping the inclusion criteria open to registered nurses of all disciplines allowed for a multifaceted view of the experiences of individuals caring for LEP patients. Exclusion criteria was registered nurses who do not have experience in caring for LEP patients during 2020. This exclusion parameter was explained and then vetted in conversations when determining the feasibility for participant involvement. Direct patient interaction with LEP patients was the minimum requirement, and registered nurses who cared for patients in a capacity which does not allow for interaction with the patient, such as when a patient has an altered mentation due to medical procedures or if the interaction is greatly limited due to workflow constraints, was not used as a participant for the study.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

For my planned research design, in-depth interviews of 45 minutes allowed for detailed explanation of experiences and opinions of registered nurses caring for LEP patients during the COVID-19 pandemic. Whereas focus groups can allow participants to generate ideas from one another and create a wide berth of information, individual interviews can yield greater depth which is important in this evaluation. I used the Zoom meeting application for in-depth individual interviews due to the COVID-19 precautions.

A brief phone interview was used to determine eligibility in accordance with the following criteria: (a) be a registered nurses employed in patient care settings since March 2020 (examples include emergency departments, clinics, acute care units, intensive care units, and procedural areas); (b) experience in interviewing and assessing patients. Exclusion criteria was participants who lacked employment as a registered nurse in clinical settings since March 2020, limited number of interactions with LEP patients, and a lack of understanding of health literacy, health care access, and LEP. Following eligibility determination, an interview consent form derived from Walden IRB was emailed to the participant. Confidentiality was maintained by assigning a randomized alpha numeric coding to each interview.

I digitally recorded the interviews with two I-phones and real time transcription using the Otter application. These transcriptions were stored in Google Sheets on a secured laptop computer. Handwritten notes were also made during the interviews, added as an addendum to the interview, and destroyed immediately after transferring information. Verification of the digital transcripts was made soon after the interview with an audio recording, and the audio recording was also kept on a secured laptop computer. Final author reflections on the interviews were also identified in an addendum.

Codes were recorded on the same Google Sheets as transcriptions. Thematic analysis was conducted to derive themes and subthemes. The first organizational coding method in vivo was used to draw from the participants' own language about their experience in caring for patients with LEP (see Saldana, 2011). In NVivo is a form of qualitative data organization that uses the actual spoken words of the participant from the interview (Saldana, 2011). This form of data analysis highlights the voices of the participants and their use of esoteric terminology found in the healthcare profession (Saldana, 2011). I used a focused and patterning approach for secondary coding.

Data Analysis Plan

The research question for this study was “What are the lived experiences of registered nurses caring for LEP patients during the COVID-19 pandemic?” To address this question, a qualitative study was performed with semi-structured interview questions for registered nurses.

Answers to these questions were recorded with digital audio applications on two smartphones, and real time transcription was made with a smartphone application. Shortly after the interview, verification of the transcript by comparison with the digital audio files was made to ensure veracity of the data. This information was stored on a Google Sheets file in an alphanumeric category to ensure anonymity of the participant, as was the digital audio files.

Initial coding took place within the Google Sheets file, using a singular column for the data, and additional columns for coding processes. The coding process connects the qualitative data collection phase with the data analysis phase, and is not an exact science (Rogers, 2018). It can be viewed as bracketing information and assigning a category which is labeled with a term (Creswell & Creswell, 2017). It is important to recognize, as Albert Einstein said, “Not everything that counts can be counted, and not everything that can be counted counts” (Williams & Moser, 2019). Coding methods are used to extract meaningful information from large sources of data, as is found with transcriptions of oral interviews, and make data available for analysis (Linneberg and Korsgaard, 2019).

An exploratory method of using two sequential coding methods was used to gain a broader and heightened awareness of the participant’s experiences (Saldana, 2016). Performing an in NVivo coding method will give an initial familiarity of the participant’s answers as well as recording the participant-generated words, especially useful when dealing with esoteric healthcare terminology (Saldana, 2016). Immediately following the in NVivo organization and coding, a Causation coding method was performed. Causation coding is appropriate for discerning the complexity of influences and effects on human actions and phenomena (Saldana, 2016). Using two methods for coding gave the actual representative words of the participants while also starting the understanding of a complex arrangement of influences experienced in the patient care continuum.

Additional cycles of coding, also known as second cycle coding, were used to develop themes for the study by evaluating previous coding methods and selecting or generating new codes as needed (Rogers, 2018). Additional coding cycles begin the process of researcher-influenced information to develop concepts, themes and dimensions from previous and existing theories to help the scientific community better understand the phenomenon of interest (Gioia, 2020).

Notes on reflections, interpretations, ruminations, or impressions made during the coding processes of the data were kept in the Google Sheets file for further evaluation. During and immediately after the initial coding processes, recordings of questions which arise or which were unanswered were made to be addressed in future studies (Gioia, 2020).

Issues of Trustworthiness

Transferability

Transferability is the degree to which this study's results can be transferred to other contexts, situations, or settings with different participants (Korstjens & Moser, 2018). Creating transferability was the reason for the detailed explanation of the methodology for this study so other researchers can make judgments regarding applicability for their own phenomenon of interest (Burkholder et al., 2019).

Credibility

Credibility is considered an essential indicator for qualitative inquiry and is promoted by using a systematic process throughout all stages of research (Liao & Hitchcock, 2018). Components of credibility include utilization of triangulation, member checking and saturation (Varpio et al., 2017). Further probing with members to check for veracity of transcription and to determine if additional information can be provided was performed by sharing the final transcripts for their review.

This study utilized triangulation to enhance its validity and reliability by using multiple methods, data sources, perspectives, and theories (Moon, 2019). Using multiple sources of information to converge upon the phenomenon of interest increases the production of valid evidence (Abdalla et al., 2018). Multiple theories, RAM and SCDNT, were used in this study to better understand how nurses and their patients adapt to language discordance and determine if self-care is adequate with the patient's level of health literacy.

Saturation in qualitative research is touted as the standard for guarantee of qualitative rigor and is achieved when no additional data are being found in participant interviews (Saunders, 2018).

Dependability

Determination of whether findings within a study could be repeated in different contexts or with different participants is referred to in qualitative research as dependability (Moon et al., 2016). It refers to the consistency and reliability of the findings and the documentation of the research process, which can allow future researchers to follow, audit, and critique this process (Burkholder et al., 2020). This study enhanced its dependability with documentation of research design and implementation, including the methodology and methods, the details of data collection, and a reflective appraisal of the study.

Ethical Procedures

Ensuring research is done in an ethically sound manner is paramount not only to the participants and the study, but also to the scientific community. Registered nurses participating in research studies cope with societal concerns of human rights, the nursing culture based on the ethics of caring, and the researcher's value of scientific inquiry

(Fouka & Nantzorou, 2011). Ethical procedures were in place during this study in three main areas.

Informed consent is a means to respect the participant’s right to autonomy and documents that a person was empowered to knowingly and voluntarily make a rational and informed decision to give consent to be a participant (Chan et al., 2017). For this study informed consent was obtained from all participants. After an initial screening conversation, participants were sent an email with scripting from the Walden University IRB Consent Form Template. Participants who wished to continue with the process replied to the email with the words “I consent” as per the instructions in the consent form.

In the event the participant did not feel comfortable agreeing to informed consent, they were given the ability to opt out of the study by either indicating this in reply to the email or not replying at all within a defined timeline. This was in line with a “do no harm” approach to protection of participants, another ethical consideration for research studies. At any time in which the participant did not wish to continue participating in the study, they were instructed to indicate so through any means and withdraw from the study.

Anonymity is another ethical consideration for research studies and the participants were shielded from discovery by identifying them with an alphanumeric identifier. Additional considerations, included using Zoom meeting applications for interviews, serving a dual function of disease prevention and allowing participants to speak from a place of comfort and security. Member sharing of transcripts with the participants also ensured that any participant-identifying interview answers can have specific elements edited to ensure anonymity.

Confidentiality is a concern in research studies and for this study all participant interactions, including emails, audio files, and pre-member-checked transcripts, were stored on a password protected laptop for 5 years, after which time they will be erased.

Summary

The research methods for this study were structured to investigate the phenomenon of interest for the lived experiences of registered nurses when caring for LEP patients and how LEP influenced their health literacy and healthcare access. A qualitative phenomenological study is an iterative process which makes distinctions unique to the phenomena through collection of data and coding the data for thematic elements. The population selected was registered nurses who play an integral role in the patient care experience and had in-depth conversations with patients regarding their health literacy and healthcare access. Selection of these participants was through convenience selection and then expanded with snowball techniques. The registered nurses worked in the year 2020 with direct patient care experience for patients with LEP. In-depth interviews were conducted with semi-structured questions, and the means for data collection was explained in detail. Coding initially used a sequential coding and organization of using first an in NVivo method and then a causation method, and secondary codings were performed for developing thematic elements. Threats to validity were explained, and precautions to be used were specifically noted.

Chapter 4: Results

The purpose of this qualitative, descriptive study was to explore the lived experiences of registered nurses who cared for LEP patients in the year 2020, which is essential to the patient care continuum for this continuing pandemic as well as future pandemics. To better understand this phenomenon of interest, and address an identified research gap, the guiding research question was “What are the lived experiences of registered nurses caring for LEP patients during the COVID-19 pandemic?” This chapter provides a description of the data collection and data analysis processes, evidence of the study’s trustworthiness, the results of the conducted study, a discussion of the results of the study, and a summary of answers to the above research question.

Research Setting

Recruitment of participants began in August 2021 and concluded in October 2021. Convenience sampling began with my asking translators in various facilities if they could identify registered nurses who had experience caring for LEP patients who tested positive for COVID-19 during 2020. These registered nurses were then contacted and asked if they had interest in participating in an interview to share their experience of caring for LEP patients during the onset of the COVID-19 pandemic in 2020. An email with an attached informed consent was sent to the personal email address of those who expressed interest, and upon obtaining their confirmation of consent, a Zoom audio meeting was scheduled. Audio recordings of the interviews were made with the Zoom platform and backup audio recordings were made with a Voice Recorder application on an I-Phone. These recordings were stored in a password-protected, cloud-based platform with alpha-numeric identifiers and deleted from their original devices and platforms. These audio recordings were transcribed using the Otter platform. Transcriptions were then edited while listening to the audio recording of the interviews. All interviews were completed, and transcripts sent to participants for their review in the time between August 2021 and October 2021.

Demographics

Seven registered nurses who met the inclusion criteria were interviewed for the study. The inclusion criteria were defined as a registered nurse being employed in a patient care setting. These criteria allowed for the nurse to gain an understanding of a patient's health experience and health literacy after March 2020 and before January 2021. The specific demographics of participants collected were limited to their work environment. All participants stated they were registered nurses throughout the entire year of 2020 and were employed in departments which allowed them to interview and assess patients with limited English proficiency: three were employed in intensive care units, two were employed in procedural care areas, one was employed in an acute care unit, and one in a postanesthesia care unit. Participants also gave the number of years they had been employed as a nurse. Additionally, participants gave the frequency of interaction with LEP patients during the specified time: daily, weekly, every other week, and monthly. All participants were de-identified after receiving informed consent to participate in the study using Pa followed by an assigned number, for example Pa01.

Participants

Interviews from at least seven participants was the initial goal for this study. Throughout the recruitment process, 28 registered nurses were contacted to determine their interest in participation. Thirteen replied expressing interest in participation and met inclusion criteria. Of these, six could not be further established for informed consent or scheduling a remote audio interview, and after seven interviews it was determined that data saturation had occurred.

Location, Frequency and Duration of Data Collection

Prior to data collection, I obtained Walden University's IRB approval for the study was completed and permission granted to collect data from human subjects (Approval Number 08-16-21-1017048). Upon receiving this permission, individual translators were contacted to determine known nurses who could be contacted as potential study participants.

Potential participants were contacted in a variety of means including in person, texting, and by telephone. In these initial contacts a general explanation of the study's research question was put forth, and if the individual responded with interest in participating in the study the inclusion and exclusion criteria was reviewed. Upon their expressed interest in continuing with a 45-minute interview, their mobile phone number and personal email address were obtained and documented for further communication.

A copy of the Walden IRB approved informed consent form was attached to a scripted email, and this email and a text notifying of the email was sent to the potential participant. Upon receiving consent from the participant, they were then sent an email with a scheduled audio meeting through the Zoom meeting platform. At this point they were also assigned an alpha-numeric identifier to have a platform for note taking. I journaled to ensure credibility was addressed in identifying personal thoughts, feelings, and experiences.

Seven interviews were audio recorded with the Zoom platform. Audio recordings over the Zoom platform were chosen to enhance the anonymity of participants while meeting the recommendations of the CDC for COVID-19 precautions. Using the Zoom meeting platform generated an automatic audio recording which was stored on a personal password-protected computer. Additionally, back-up audio recordings were made on a password-protected mobile phone using a voice recorder application; these audio files were then uploaded to a personal password-protected computer and deleted from the mobile phone device. Throughout the interviews, I took notes on a pad of paper, and at the end of the interview these notes were transcribed to a spreadsheet under the alpha-numeric identifier, and the paper note was destroyed.

I conducted each interview in my private home study. Prior to each interview, a scripted introduction was read covering among other items the purpose of the study, methods of recording of the interview, and means to establish anonymity. The interviews lasted between 38 and 72 minutes. In the instance of an interview projected to exceed the predetermined 45 minutes, the participant was advised of the time constraint and asked if they wished to continue. All participants exceeding the 45-minute predetermined time frame asked to continue with the interview.

The semistructured interview questions (see Appendix A) were used for all interviews. The formatted questions allowed for a high degree of uniform inquisitive questioning of all participants, which yielded a means to compare responses to best draw the lived experiences of registered nurses. The use of a semistructured interview process allowed for clarifying and probing questions to be asked of each participant. An additional benefit to asking clarifying questions was the drawing out of more in depth explanations from the participant regarding the specific interview question as a whole.

Data Analysis

Thematic analysis of the interviews was performed to systematically identify, organize, and develop insight into patterns and themes across the interviews (see Braun & Clark, 2013). This analysis involved several identifiable steps: (a) familiarization with data by transcribing audio files into textual data; (b) reading each transcript multiple times while noting initial ideas and impressions as key meanings; (c) generating initial codes by collating the data that is potentially relevant to the research question; (d) searching for themes by organizing codes into potential themes and subthemes; (e) identifying and naming themes that are related to codes as well as the overall data set; and (f) reviewing themes and subthemes for alignment between the data, research question, and phenomenon of interest (Lee et al., 2021). Once codes and key words of themes were identified, search functions within a Google Docs workbook were used to determine applicability across the entire data set. A workbook with multiple spreadsheets was used to organize codes, themes, and subthemes.

Codes

In reviewing the data set, interview by interview, I made notes regarding the answers provided by participants. These notes occurred by making notations on the spreadsheet where they were stored, and from these notes specific words or concepts began to emerge across the interviews. Review of the entire dataset revealed an emergence of codes which could be applied to the participant’s statements. Following several readings of the transcripts and further narrowing the applied coding, I reviewed each code as it applied to the research question “What are the lived experiences of registered nurses caring for limited English proficient patients diagnosed with COVID-19?”

The emergent codes included barriers, compassion, family as translators, limited resources, time constraints, reasons for interpreter use, adaptation for COVID-19, communicating with body language, culture, frustration, isolation, patient needing family connection, and touch.

A trend became apparent, as highlighted in Table 1, in which codes, such as frustration, isolation, patient needing family connection, and touch, were only brought forward by participants who worked in acute care and intensive care unit settings. Universal coding was found for all participants regarding barriers, compassion, family as translators, limited resources, time constraints, and reasons for interpreter use.

Table 1

Descriptive Demographics of Study Participants

Codes	Number of Total Participants (*N*=7)	Number of Acute Care and ICU Participants (*n*=4)	Number of Other Participants (*n*=3)
Barriers	7	4	3
Compassion	7	4	3
Family as translators	7	4	3
Limited Resources	7	4	3
Time Constraints	7	4	3
Reasons for Interpreter Use	7	4	3
Adaptation for COVID-19	6	4	2
Communicating with Body Language	5	4	1
Culture	5	4	1
Frustration	4	4	0
Isolation	3	3	0
Patient needing family connection	4	4	0
Touch	4	4	0

Themes

From these codes, as well as an overall view of all the participant answers to the semistructured interviews, four themes began to emerge: nurse compassion, barriers to care, patient and their family, and communication challenges. Themes are developed from the coding process as individual codes and can be combined with others to suggest a greater patterning across the dataset. An example of this are the three codes, time constraints, limited resources, and additional barriers, which can be expressed as a common theme from participants to describe the barriers they faced in providing nursing care to COVID-19 positive patients who were LEP.

Additionally, one single question can produce multiple codes in the answer, such as a response from Pa02:

> Oh, there was just barriers everywhere. You know, the masks, the noises. Patients that were couldn't speak English and on top of that were really hard of hearing. Having to just rush through something. And kind of do it, not necessarily without the patient's permission, but you just kind of had to do stuff without them fully understanding. And that is part of what was so frustrating to both people. Because, like I said, a lot of times, we would just have to do stuff. Either just give them their medication, or give them a breathing treatment or, you know, communicate with them as best we could. And that was probably the hardest part. Because if they didn't have family that they could call, or if we didn't have someone there to interpret for us, they just...you could just see them, just the sadness, and, you know, people starting to get depressed.

Thus, while answering a question about barriers to communication, participant Pa02 touched upon multiple themes: nurse compassion ("What was so frustrating to both people"), barriers to care ("we just had to do stuff without them understanding"), patient and their family ("they didn't have family they could call"), and means of communication ("the masks, the noises. Patients that couldn't speak English and…were hard of hearing"). These are the four themes (See Figure 1 and Table 2) making up the nursing experience caring for limited English proficient patients diagnosed with COVID-19.

Figure 3

Four Themes

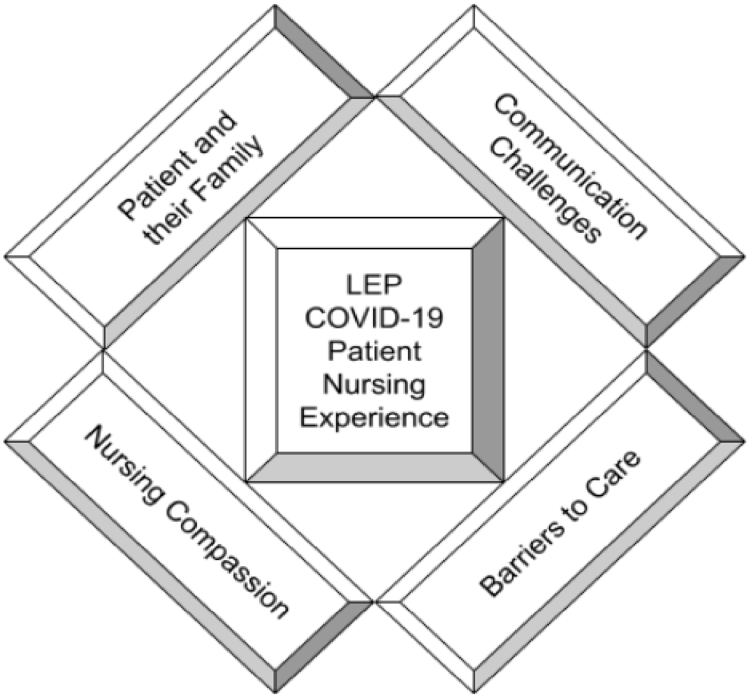


Table 2

Themes and Subthemes

Themes	Subthemes
Nursing compassion	Isolation
	Ability to connect
	Frustration
Patient and their family	Family members as translators
	Need for connection
	End of life
Communication challenges	Translator services (in person, video, phone)
	Physical communication
	Unsanctioned translation
Barriers to care	Time constraints
	Personal protection equipment (PPE)
	Limited resources

Nursing Compassion

Throughout all the interviews with registered nurse participants, a degree of concern for the sufferings or misfortunes of their patients and families was identified as compassion. A struggle existed for participants caring for limited English proficient patients, as noted by Pa01,

> Showing empathy and compassion, unless you're very good at conveying that nonverbally. It's hard to reassure your patient that, you know, we're going to work through this. We're going to hopefully pull you out on the other side. And it was such a novel virus, that it's so hard to do in your own language with somebody, let alone in Spanish.

Combining both verbal and nonverbal means of communicating compassion were identified particularly when translator services could not be obtained due to a rapid decline in the patient's condition, as recalled by Pa03:

> If we had to begin to intubate somebody, and there wasn't an interpreter, then we weren't able to clearly tell them what was about to happen. I just tried to be in a position where I could, you know, touch the patient's arm and be able to see them and use verbiage that's a little universal, and just tell them over and over again. It's okay. It's okay. Just try to be reassuring. And, and right there for them. They didn't feel completely alone. But that can only go so far to comfort someone that doesn't understand what you're doing or saying.

Nursing compassion for patients was noted to have four identifiable subthemes; isolation, ability to connect, developing trust, and frustration. Each of these subthemes allows for an expansion of how compassionate the participants were for their patients with language discordance and dealing with a novel virus that the healthcare industry was trying to navigate in many different aspects.

Isolation. A key component of preventative measures by many healthcare facilities during 2020 in response to the COVID-19 virus was to enact no visitor policies. While variations between differing entities existed, many inpatient facilities held strict no admittance policies by family or friends. This had an effect on many patients, as best explained by Pa02:

> They're completely alone. We had a patient, a Spanish speaking patient, that was on our unit for I think 32 days, somewhere in there...essentially, these people are in prison, it's complete isolation, and you're the only person that they see for 12 hours, three times a day...you know, people starting to get depressed and they wouldn't, you know, want to get out the bed as much or they didn't want to, you know, talk as much or when you were doing stuff, they would just kind of look out the window

Ability to Connect. Having the ability to connect and draw meaningful interactions with a patient is a crucial aspect of nursing. Development of trust is also a key component, so the patient is comfortable explaining themselves as well as asking for clarification and assistance. Establishing a connection and expressing interest in a patient without verbal communication can be difficult. When asked for any additional input for the final interview question, Pa06 added:

> And, you know, one of the, one of the components of being a nurse, as a profession as being a nurse, is to really have a lot of, you know, empathy and sympathy for your patients...it's very simple, but I think that touch is huge. How you interact and how you touch a patient, I mean, simply holding someone's hand and being there and looking in their eyes. I think people get that it doesn't matter what language you speak. I think that says a lot.

Utilization of methods which are not sanctioned translation methods was frequently encountered in these interviews. To engage patients in developing trust in their health care management, Spanish speaking staff were sometimes utilized, as Pa03 recalled:

> to have those critical conversations, but it definitely makes it easier for them, or for any other individual, like, maybe some of the CNAs [certified nurse assistants] speak Spanish, and it's just easier for them to communicate and gain that not only the trust, the connection, with the patients, and also their family members.

Having individuals who can have person to person communication was a preferred method of communication over video translators with patients who had limited English proficiency, as noted by Pa05:

> Well, I would say, being assured that they're, they understand, even with the video interpreter, it's difficult to trust the interpreter. Cuz, because they can't word things exactly as we're wording them. I mean, they do a good job. But it's hard to have that direct communication with the patient. I don't know, for a fact, if they are understanding what I'm saying, if that makes sense.

Pa03 noted that even with an in person interpreter there can be difficulty in connecting with patients when there is language discordance present:

> it's just easier to have a conversation and to be real with somebody. And sometimes when you have an interpreter, or the video, like in person or on the video, it can be a little more...it can be more impersonal. I feel like because it's like you say something, and then you have to wait for them to say it to the patient. And then for the response, as opposed to sitting next to the bed and like holding their hand and just saying it, you know. Which you can, you know, you can still do that with somebody who's Spanish speaking. I just feel like there's that delay in conversation, which causes like a barrier and kind of a break in just being personal with somebody and getting, you know, closer, I guess in a way having that connection.

Frustration. Frustration was a common thread expressed in different manners throughout the interviews. Frustration for the patients, for the nurses, and at times for the families as well. This could come from many sources, including personal protective equipment (PPE) as Pa02 recalled:

> I don't think the PPE really made a difference until we got the reusable respirators. And that just caused frustration for patients that spoke English or a different language because you couldn't understand what the person was saying. I mean, it just, it was awful...I mean, we couldn't even understand each other, we couldn't even use our phones or Vocera because it couldn't understand what you were trying to tell it to do. They were awful...Which was frustrating. Because

> even before COVID, and even patients that spoke English, whenever you would, you know, gown up or anything, they were like, well, what's wrong with me? What do I have that I could spread? or Why are you doing that? So I can only imagine. And I mean, and you could see like the kind of fear when you would walk in like, why are you looking like that. And they just didn't understand and there was no way to tell them. So it was just another thing to add to the frustration from the nurse because you see your patient is scared and there's nothing you can really do to ease that for them.

Similarly recalled by Pa03:

> when we switched to the respirators, you know...it's very hard for the patients to hear us. Frequently we have to kind of yell over those respirators for the patients to be able to hear us. And then also, like, if they're on high flow oxygen, that's it's just very loud. It's...it's a lot of noise going into their nose and you know, kind of in their, their ears. So we can't talk, we have to talk very loudly and scream. They can't really hear us so it can just, you know, cause miscommunication, or frustration for the patient, too.

Another point of frustration was observed by Pa02 in recognizing that patients who were not assigned to her were not eating. Organizing food delivery from home by a patient's family members was effective, but required a lot of coordination and was time consuming.

> Okay, this, this patient has been on the floor for 2 weeks, and I've had them a couple of times and they never eat and I'm getting a report that they didn't eat. So,

> they would just, I mean, and that what was…that's what was hard because you want to help your, your teammates and your other patients, like other patients on the floor, but you're already so spread that you didn't have time to take on another patient and be like, 'Hey, you know, I overheard this patient hasn't eaten in a couple of days. Have you called the family to see if they can bring something in?' And usually the other nurse is like, 'I don't have time for that.' Like, I know, I get it.

Pa02 also reported concerns with the discharge process, in regards to the uncertainty of the unknown concerning the novel COVID-19 virus and language discordance. This was also touched on by several other participants in different ways as noted by Pa02:

> we have our discharge packets. We can attach information in their native language. But we are kind of I always felt like I was setting them up for failure, because they don't have the resources. And the knowledge, I mean, we would, one of the things that we would ask families to do is to just provide, you know, limited contact, because we didn't know at that point, you know, if they were in the hospital for 4 days, are they still contagious, are they not? So we would ask that just one family member would come to pick up the patient. And again, they weren't allowed in the hospital. So we were literally, literally just pushing people out in wheelchairs and putting them in the car and leaving them. But you will see, you know, a car pull up, and there's, like, five little kids in the car with, you know, one adult, and they just not that they didn't understand because they also would

> come with, you know, sometimes three adults in the car to pick them up, they just, everybody was so excited to see their family member, that you would put these people in the car, and you're just like, Oh my gosh, every single one of those people, every person in that vehicle is now you know, exposed and nobody's wearing a mask. And so we're gonna see all those people in like a week. So it was just, you know, lack of resources for them. Lack of knowledge on top of, you know, the language barrier, because we had some people that spoke English that, you know, still they, you know, COVID wasn't real and said they didn't follow, you know, any guidelines or education we gave them.

Patient and Their Family

Several participants remarked on the importance of family to their patients and the perception of its importance for their culture as a whole, such as Pa03:

> I'm sure that if they watch the news, they hear things on the news, but really, you know, the down and dirty of, that's a respiratory illness, it's spread very quickly. You know, in some of these families, I mean, they, they have like the matriarch, they have family dinners every Sunday, like, you know, that's kind of like their kind of, you know, their heritage. They are very family oriented. And, you know, they get together and they spend time together. So, I just, I don't know, necessarily and since we see so many Hispanics, I just wonder if they understand what this disease is all about, you know...when we get patients...their whole family will be sick as well.

Family Members as Translators. Use of family members as translators was noted by all participants, to varying degrees. Pa07 noted:

> Family is faster. It’s just easier. It’s so much faster. Intake questions can be addressed without having to translate. ‘When’s the last time you ate?’ ‘Last night at dinner.’ They know. They’re family, they live with them. It’s like you’re talking to their family, and they can clarify if needed. Their caretaker. Anything medical, anything at all, like allergies, history, education, consent, procedures, all that’s through a translator. Other than that, why bother getting a translator when one’s sitting right there. Are you cold? I don’t need a translator for that. Their kid will tell me ‘yes, and get two blankets because they’re always cold’. And honestly, that might not happen with a video translator, because it’s so formal.

A specific complication of having children acting as medical interpreters was brought forward during the interviews by Pa03:

> I've had patients who have family members, like younger family members, teenagers even, who speak English and Spanish. They will try to turn to their family to communicate. And I've been in situations where it's extremely inappropriate for the kids to interpret back and forth, and that's what the family or the patients want them to do. Like you know because they know them better, or they feel more comfortable with a family member as opposed to doing it with a device. So that's actually, I've been in situations where it's been, you know, uncomfortable for the family member, we have asked the patients to not use the family member.

Pa02 noted that if communication was not determined to be effective in English:

> then I will use the family member. They, 90% of the time they come to the hospital with a family member who is willing to stay with them the whole time. If that's not the case, then I would try and fumble through with my limited English.

Pa02 noted the ease of using an at home translator as it allowed the family to be updated at the same time as translation was occurring, “If there was somebody at home that we could call on speakerphone to help us interpret for them like a family member.”

Need for Connection. The importance of patient’s remaining in contact with their families was noted by several participants. Pa06 brought forward:

> there's a lot of closeness in between the generations in the Latino group that lives in this area. And when the family members can't even see their loved one in the hospital, it creates a lot of distress for the patient, the family, and then it creates a lot of depression and sadness, I think, too.

Pa02 found creative ways to connect patients to their family members, or at least help to alleviate isolation:

> we had amazing, amazing aides, so they would try to as much as they could go into rooms, just to say hi, you know, to the patients that they knew that they only spoke Spanish. Because they were Hispanic also, and so they know how much family how important family and everything is to that patient. So, they would pop in, even if it's just real quick to say hi, but usually, it was the nurses. I would just go to them and be like, ‘Hey, you know this patient in this room is getting really depressed, if there's any time that you could spend in there just to talk to him to

> see how he's doing, or see if he needs anything or just to chat with them, you know, I would really appreciate it.' And I started bringing in, which this is probably totally illegal, but I started bringing in dollar scratch tickets. And if I had to ask like, an aide or another nurse, or, you know, something, or if somebody was having a staff member was having a bad day, I would just give them like $1 scratch ticket to say thank you, and just to, you know, not really give incentive, because they didn't really need any incentive. But just as a thank you. And the patient's like, just really appreciated somebody that could understand them. And talk to somebody that wasn't just acting things out, I guess.

Barriers presented while trying to connect patients with their family members, as recalled by Pa03:

> And a lot of times, even if they could call a family member on the room phone, they didn't quite understand you had to, you know, dial nine and then the phone number to get out. So that would just get frustrating to them. Also, they won't even call family unless you were in the room and helped them dial. And because his family didn't have the technology to do a video call so that he could see his family and so that his family could see him.

End of Life. The need for connection between patients and family extended into end of life consideration for Pa03:

> we were taking somebody off of a vent or oxygen to let them die peacefully. To say goodbye, it was just one of those things where you had to hope that some family member on the outside had the technology to receive that video call or

> even just to translate for the patient, you know, this is what's about to happen. And there's nothing else we can do for you. We'll be with you. But we had to become their family, and their interpreter, their everything because all of our extra resources were eliminated during COVID.

Particular challenges brought forward by Pa01 illustrated the difficulties in navigating end of life considerations for patients and family members during the COVID-19 pandemic:

> I think the death and dying part was extremely difficult when you were working with people, not in your native language. I kind of touched on it, you know, showing empathy and compassion. But on those specific occasions, we would let the families come in and say goodbye to their loved ones. And so I think that was like a whole different issue that COVID-19 brought, of course, nationally, you know, so many people died. But to do that, with an iPad, because their whole family comes in and doesn't speak English. And you're trying to convey to them how to dress appropriately, and their PPE, to go in and say goodbye. And then explain, like, why the room is doubled. Cuz you're just like, I'm so sorry. You know, for this, you know, when they're just like, why can't we just leave them intubated? Why can't we just keep going with therapy? And you know, but I think like we had discussed, I don't think that care management was ever different between somebody that you know, spoke English versus not, this is just the COVID-19 effect, where people end up, you know, maxing out ventilators and maxing out therapy, and they're still declining into the 70s...60s... now they're in

> the 50s. And you just tell them, like this is it. This, either you get to say goodbye right now, while they're still hanging in there or you say goodbye when they've already passed. That was, that had no cultural translation. With the people that only spoke Spanish, I would say nine out of 10 times they could not let go. Saying no, they're still alive. Why aren't you trying? That is like totally different than I think, like, you know, English speaking American, like I don't know if that we're that attached to our loved ones when they are. And they're like, God will save them, and I was like, either say goodbye or don't.

Communication Challenges

Translator Services (In Person, Video, Phone).

The three primary forms of sanctioned translator services were noted to have benefits and negatives by the participants. In person translators have several advantages as noted by Pa05:

> It just seems like the patient has a better response if it's a visual if they can see the person. [In person translators] are at the hospital on a consistent basis, and they're from the area, so they're more aware of the culture. They've probably seen the patient more than once. So they formed a relationship with them.

Limited hours were noted by several participants, and Pa04 observed:

> And then there’s this gap when they get there and the interpreter gets there. So, I’m like already done by the time they arrive, and I’m not running for a video. I’ll just fumble through it with my limited Spanish and their limited English.

Video translation services were noted to have the complication of location of the actual devices, or their availability. From Pa01:

> It may be an iPad that’s stuck in another COVID room. So the fact that you have to wipe it down completely to bring it to another room takes time and effort. And sometimes you don't know exactly which COVID room it's hiding in. So when we did have a maximum of three patients, we're trying to look around the room through a window. I think that just all it all just takes time and takes time away from us informing the patient because people get impatient, just waiting for those iPads.

Pa02 similarly found challenges:

> So trying to track down a tablet was hard and very time consuming. That sounds awful. But we just, you had four to five patients, and you just didn't have time to always track down a tablet to communicate with people.

Phone translation services were negatively reviewed by all participants who mentioned their use. As noted by Pa02:

> the phones were really hard for people to hear on because of all of you know, the machines and everything else going on in the background. We found that the phones weren't very effective for us.

Pa03 also expressed her experiences:

> We do also have the blue phones that you can use, which I’ve used those quite frequently in the past. But I can't tell you how many times I've tried to use the blue phones, and the patient is not willing to, or they don't want to talk on the phone. It's very, it can be a little impersonal...When I bring in the phone, and they're immediately like, I don't want to, they'll shake their head, or they'll kind of

> wave their hand and turn their head, their body language goes away from me. Then there's other times where I will have them on the phone, and I just kind of feel like they just get disengaged. And then you know, they just stop really giving. They stop engaging in the conversation.

Physical Communication. Use of nonphysical was noted by participants as a means to communicating in the presence of language discordance.

Pa01: So, it's very difficult, it's very difficult if you don't actually have a translator, and you don't speak the language to communicate what you're going to do. Or what's going to happen. You just basically mime things to them, and hope they understand.

Pa02: If there was somebody at home that we could call on speakerphone to help us interpret for them like a family member. Spanish words that I know, and then kind of acting things out or pointing to your body or something like that...I got really good at charades.

Unsanctioned Translation. Use of family members has been previously brought forward under family members as translators. Additional uses of unsanctioned translator include frequently asked questions and use of internet services such as Google translate.

> Pa02: One of the interpreters did put together just a sheet, and we would laminate it and take it into the room of questions that we could ask. Just common questions, you know, Are you in pain? Do you know this medication I'm giving you? The parts that didn't work with that is that when you would ask them these questions, they were usually not, they usually wouldn't answer yes or no back.

They would kind of assume that you could understand, even though you were reading from a sheet, so they would go into elaborate detail of this answer. And so I eventually just stopped using it because it became too frustrating for me because, and then the patient would get frustrated and just kind of like wave you away. Or you could tell they were getting angry and frustrated, because you can understand and they couldn't understand. And so I stopped using those sheets, because it just I felt like it made everything more frustrating for both parties. But when we could use the tablets, or take a computer in there, because our rooms didn't have computers. We could take something in there and just use Google Translate. We would use that. But that'll also only went so far because the patient can usually, couldn't type anything back in or they didn't understand how to communicate back with us. We were back in the same situation where we could tell them something but we couldn't understand them. We had to type it in. We didn't have any microphone access to where they could say something back into Google Translate. So I would just type in a question and then the best I could try to read it and pronounce it correctly. But again, that would in turn, have them say something back to me that I didn't understand.

Pa01: People did get the Google translator on our phone, though. And granted, it was a little difficult. We also put them on the iPad. So you can Google translate a whole sentence as soon as you type it in, and it can verbalize it. So I do think that that was an adaptation that we did. And of course, it's not certified but in a pinch, helped.

> Pa05: there's Google Translate. Which word? You know, at the very least, use that but I don't feel comfortable using that, because I don't know. I'm not familiar with the word you know the meaning of the word and it could mean something different in their language.

Use of staff was noted by Pa04 as a means of using translators who were not certified, but helpful:

> The other thing that's available is we have staff that can speak English. We've had to use them in emergency situations where we just don't have time to flitter about with, you know, tracking our translator or getting a video interpreter, which is never optimal, because you're trying to like place this video conference in the middle of, you know, chaos. It's easy for a patient or person just to get in their face. Think you know, our receptionist is very good at being able to kind of speak Spanish, she's been scolded many times not to do it by the interpreter service. But if I need to figure out how somebody is going to get from their wheelchair into their bed, I don't have time to go and find the interpreter to do that. It's just easier for me to have the receptionist to do it.

Barriers to Care

Time Constraints. Limited time to perform tasks has been mentioned earlier with locating tablets, concern for patients not assigned to participants, critical patients decompensating. Several additional instances were brought forward by participants. When coordinating family conferences with patients who were unable to hold a tablet due to their severity of illness Pa01 noted:

> And so we were able to FaceTime or Zoom or Google Chat, whatever with the family members, so they could see their loved one via camera, at least, I think that that was great, but also cumbersome because you're trying to coordinate, what time is best in my day, when I have, you know, two different COVID rooms where I'm gowning up and gowning down. Then you have to stay in the room sometimes to hold your iPad. While the families are talking to their loved one. I mean, that just takes time and coordination.
>
> Pa06: don't think they got the same amount of attention that people who spoke English got, because I think that it did take a lot more time and effort to do the right thing as far as teaching and answering questions.

Personal Protection Equipment (PPE). Difficulties of using PPE due to COVID-19's respiratory infection pathway requiring masks has been discussed earlier. The need to don the proper PPE has other influences on the care delivered to patients with limited English proficiency who were diagnosed with COVID-19. Pa06 recalled the customer service element as well as the impact on medical care:

> I can't just run in the room like normally we could because you're in isolation. And I've got to put all this garb on so it may take me a few minutes to get in the room once you put the light on. So if you need something it's try and think ahead, because it's going to take me longer to get there because if it's an emergency, I still have to put all this stuff on. So yeah, I tried to explain that to all of them at the very beginning, no, this is to protect me you have a deadly contagious disease. And that's the way I put it, which a lot of times would get eyes really wide. When

> you say you have a deadly contagious disease. I don't think a lot of people, no matter what your language you speak, considered that but and I would say this is why, I have to put all this on before I come in. So it may take me a little while...I remember one time, there were two patients in a room, the ventilator went off. Because somebody was disconnected from the ventilator. Nobody was around to hear it. And I happen to be walking by. And I looked up on this, patient saturations were dropping, and I still had to put all my protective gear on before I ran in there and saved him. Put his oxygen back on, so it can be pretty harrowing.

The overall influence on customer service was identified as having a strong component of fear, both in seeing staff entering the room as well as the hindrances of imposed by staff wearing PPE, especially if sanctioned translation services were not available for explanations to the patient with limited English proficiency.

Limited Resources. Limited resources have been noted earlier in this chapter. Additional limitations were more commonly identified by the participants who worked in the acute care and intensive care units. The communication complications required for limited English proficient patients was expounded by the surge of patients in the first waves of COVID-19, as recalled by Pa01 and Pa03:

> Pa01: One barrier is the availability of the iPad translator, there was only one on the unit. So, if my Spanish wasn't enough, or if we had two patients requiring a translator, we would have to split the time for that iPad...The problem that we ran into is that we had before COVID, we would have maybe one or two patients on the floor that needed an interpreter or spoke Spanish. And when COVID hit, I

> would say it was sometimes up to 60% of our unit was Spanish speaking only. So just to wait your turn was hard when you had so many tasks to get done. Those tablets usually went into the rooms where something like an intubation was about to happen. Or if we were taking somebody off of a vent or oxygen to let them die peacefully to say goodbye, then that's usually the rooms that the tablets went into.
>
> Pa03: Because usually I try to use an in person when there's a big decision that needs to be made as in if somebody is going to like comfort care or, you know, declining in their health. So with the video, you know, like I said, in the ICU, we only have two, and at times, especially with COVID we see a lot of the Hispanic population, especially with the first wave. And the second wave, we had a lot of Hispanic patients. And if they were unavailable, in different rooms, you know that it would be kind of a pain to either take it out of another room and take it away from another patient. Or, you know, so it was just a little bit difficult, more difficult that way, just with less resources or less videos.

Evidence of Trustworthiness

Credibility

A systematic approach was used throughout the interview process to ensure credibility of the interview and data interpretation process. Credibility was ensured in this study by using three critical components: triangulation, member checking, and saturation. Triangulation components included recruiting registered nurses from multiple disciplines, using two theoretical schemes to interpret the phenomenon of interest, and utilizing the dissertation committee chair as an additional and independent evaluation of the data transcripts. Participants were emailed secure and encrypted copies of the transcripts of their interviews for them to review and give feedback as to the accuracy, as well as given the opportunity to provide additional information if warranted. Upon completion of this dissertation, a URL link will be emailed to all participants so they may review the study in its completed form. Saturation was noted to occur prior to seven interviews, however utilizing the literature review as a basis to support the number of interviews to be included for this study, the minimum number was determined to be seven participants interviewed and this is the inclusive number (Vasileiou et al., 2018). Additional concepts to increase credibility brought into the study included use of audio recording for interviews.

Transferability

In the interest of ensuring transferability, seven nurses from different departments were chosen to enhance the capability of future studies to be applied to other participants, settings, situations, and even contexts. Saturation was found to occur prior to seven interviews. The detailed explanation of the interviewing process and manner of exploration using the semistructured interview will assist future researchers to make decisions regarding the applicability of this study for their own phenomenon of interest. Particularly, the differences from responses of registered nurses working specific areas and lacking input to codes such as frustration, isolation, patient needing family connection, and touch.

Dependability

The methodology as outlined in Chapter 3 was adhered to so that the findings within this study can be replicated by other researchers, and also to allow them to audit and critique this process. Through the detailing of the methods used, as well as the interview questions noted in Appendix A, a stepwise replication by other researchers could easily be obtained. Additionally, a worksheet was created at the study's outset to ensure key decisions were documented and their rationales were supported.

Confirmability

During the coding process, careful notes were taken to ensure guidance towards an unbiased view of the transcript data. Codes and themes were developed according to the presence of material as presented in the transcripts. Additional reflection back to the underlying phenomenon of interest and research question allowed for a structured bracketing, and reduction of allowing personal views into the interpretation of data.

Study Results

Department and Role

Participants were recruited from multiple health systems in the same geographical area. Their area of expertise came from intensive care units, acute care units, post anesthesia care units, and procedural care areas. All participants were employed as direct patient care registered nurses. The number of years employed as a nurse was also collected, however this information is not shared in this study to protect the anonymity of nurses; an example of this could be a nurse with an unusually long career could easily be identified when compared with her department of employment.

In the interview questions sent to participants prior to the interview, suggestions for frequency of contact with patients with limited English proficiency was given as daily, weekly, or monthly. All but two participants chose from these guidelines. The majority of participants, five of seven, reported interacting with limited English proficiency patients on at least a weekly basis, with the largest interval at two weeks.

Table 3

Participant Area of Nursing and Interaction Frequency

Participant	Area of Nursing	Frequency of Interaction with LEP Patients
Pa01	Intensive Care Unit	Weekly
Pa02	Acute Care Unit	Daily
Pa03	Intensive Care Unit	Every other Week
Pa04	Procedural Nursing	Weekly
Pa05	Procedural Nursing	Weekly
Pa06	Intensive Care Unit	Weekly
Pa07	Post Anesthesia Care Unit	Every other Week

Methods for Establishing Clear Communication

Responses to how determination was made if communication was effective were separated into two categories, verbal and physical. Verbal clarification of the information given, or general questions to elicit a response, were the most common and consistent method of verifying if a patient understood the communication from the registered nurse.

Participant Pa01 revealed “I would ask them if they had any questions and if they understood, in their native language.” Pa03 stated that even with an interpreter, in-person or video:

> sometimes they’ll just say yes, or they’ll just shake their head. No matter what you ask...I can ask them to repeat back what I, what I taught them, or, you know...if I see a look on their face, like they don't understand, or if I get the vibe that they're not getting what I'm asking or telling them.

Facial clues were a shared physical key in determining if the communication was effective, as noted by PA02: “Usually their body language, looking at their face. You could kind of tell if they were just answering yes. Or like if they hesitated or just, you know, maybe looked more confused. I would rephrase the question.”

Engagement in conversation was another method shared by participants, as Pa04 brought forward “I engage them in conversation, and if they’re engaging me back, then that’s how I determine that.”

Table 4

Verbal Confirmation of Clear Communication

Participant	Verbal confirmation of clear communication
Pa01	Ask if they had any questions (in their native language)
Pa02	NA
Pa03	If patient is just answering yes they don't understand
Pa04	If they are engaging in conversation If their family members are speaking for them the patient doesn't understand
Pa05	Answering questions appropriately
Pa06	Ask if they have any questions
Pa07	If they engage in conversation and answer open ended questions

Table 5

Physical Confirmation of Clear Communication

Participant	Physical confirmation of clear communication
Pa01	Head nods are not an indication of understanding
Pa02	Body language, facial expression
Pa03	If patient is just nodding their head they don’t understand
Pa04	NA
Pa05	Nodding their heads
	Can they perform visual teach back
Pa06	Smiling and Nodding indicates they do not understand
Pa07	NA

In the event communication was not effective, the majority of participants sought out hospital sanctioned translation services in three variations: in-person translators, video translators on a mobile device such as a tablet or I-Pad, and dual phone services. Additionally, they all indicated the use of alternates to these translator services, such as family members and staff.

Table 6

Use of Health System's Sanctioned Translation Services

Participant	In person translator	Video Interpreters	Phone Interpreters
Pa01	Limited availability due to COVID-19 restrictions	Primary translator	Available
Pa02	Limited availability due to COVID-19 restrictions	Limited availability	Available
Pa03	Limited availability due to COVID-19 restrictions	Used every two hours	Unsure of location
Pa04	Easily reached, but not always available	Borrow from another department	Used maybe once
Pa05	Primary interpreter, Better patient response	Better than phone	Available
Pa06	Available	Used frequently	Less effective than video
Pa07	Best option	Alternative option	Never used

Table 7

Use of Sanctioned Health Service Translation Services

Participant	Google Translate	Spanish Speaking Staff	Family
Pa01	Used with difficulty	RNs	Complication of POA
Pa02	Cannot understand patient	CNAs	Call family to translate
Pa03	NA	RNs	Inappropriate use of minors translating
Pa04	Cannot understand patient	NA	Primary source unless obtaining consent for procedure
Pa05	Unsure of proper words	Administrative	Discharge teaching
Pa06	Not used	RNs	NA
Pa07	Ineffective	NA	Non-medical only

Barriers to Ineffective Communication

Regarding transmission precautions and treatment, Pa02 observed that there were multiple contributing factors:

> three generations living in one house...and unfortunately poorly educated as far as what would keep them safe, like masks and hand washing and staying home...I feel like it was a lack of education and resources for them. I mean we couldn't find masks, so a lot of the population couldn't find masks or even know how to wear it or how it was transmitted.

Workplace conditions at a large meatpacking plant were reported to have an influence on transmission precautions by Pa01:

> They don't have health insurance. They don't get days off. If they don't show up, they don't get paid. So they were working in environments that didn't support social distancing or support their staff even staying home when they are sick.
>
> Pa06 relayed: There was a big outbreak at the meatpacking plant here. I know that also within that particular business, that particular company at the headquarters where they had more of the supervisors and such. And I know this because [a family member] works in a situation, they had desks that would face each other. And they were probably, well, I know they were closer than six feet. As far as sharing the office space. So there were a lot of people in a small space in the office. And then also when they got to the meatpacking floor to the plant, they were almost shoulder to shoulder.

Difficulties witnessed in taking care of patients were numerous as noted earlier in this chapter's thematic exploration. Additionally, Pa07 noted:

> As a healthcare provider, it affects pretty much everything. You know teaching is a big part of nursing. And when your patient doesn't understand what you're saying even if you have an interpreter, sometimes the words don't translate the same... a lot of times I go through this whole Spiel with my video interpreter... I thought I just explained that really well, and it didn't get across to you somehow.

The effect of language discordance on healthcare management was seen by participants as not being exclusionary or remarkably different. Pa01 noted “Maybe more decisions were made on their behalf by the healthcare team, then normally would have happened, though I'm not sure that wasn't due to the extenuating circumstances of a novel virus we didn't know how to treat.” Pa04 noted “the Doctors are much quicker to interview the patient. They're much more friendly with them and they're much more inquisitive about the language itself... Everybody's getting the same basic treatment as the other person.”

When asked about ways co-workers dealt with or adapted to meet the needs of limited English proficient patients Pa02 brought forward “I feel like we all have the same tools.” Pa06 observed:

> I've seen some people go above and beyond and I've seen some people just disregard it. It takes so much more time to work with a patient who has language problems it almost doubles the time you need with that patient and I think some people just blew it off and said ‘Well, whatever, I mean what are they going to

> say?' And other people were really, really good about being compassionate and knowing that this is going to take more time.

In light of limited resources available from their hospital, Pa02 recalled:

> nurses were even using their own, you know, telephones and helping patients, if their family members or members had the technology to set up, you know, accounts for patients to use. You know, FaceTime or video chat of some sort on their phone so that the patient could see their family member and they could chat even if it was just for, you know, five minutes. You know, to say hi.

Summary

Four themes were brought forward from the semistructured interview process of seven participants: nursing compassion, patients and their families, communication challenges, and barriers to care. These themes were developed from the identification of codes after the transcripts of the interviews were processed through several readings. Identification of subthemes was important to best discuss the findings of the experiences of the registered nurses caring for LEP patients diagnosed with COVID-19. Having these findings organized into themes and subthemes, Chapter 5 will have an interpretation of the findings made with the literature review conducted in Chapter 2.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to explore the identified gap in research for the experiences of registered nurses caring for limited English proficient patients during the COVID-19 pandemic. The guiding theories for this study were RAM and Orem's SCDNT. Using these theories, seven registered nurses who cared for the identified patient group were given the opportunity to share their lived experiences in semistructured interviews. Four major themes were identified from the interviews: nurse compassion, barriers to care, patient and their family, communication challenges.

Findings from this study can have implications for positive social change by providing insight to the experiences of patient care for a vulnerable population. Entities which can find applicability to change practice for a positive influence by using this study's findings include healthcare organizations of any size and level of care, as well as community representatives such as churches, interpreter services, and other organizations promoting means to better health for limited English proficient patients.

Interpretation of Findings

The gap in literature identified, following the literature review noted in Chapter 2, was that the lived experiences of registered nurses has not been explored in regard to how a patient's health literacy affects healthcare access in LEP patients during a pandemic. Using this as a framework, I constructed the interview questions with the guidance of the two nursing theories, RAM and Orem's SCDNT.

Viewing the nursing experiences as an adaptive process in which coping mechanisms are employed to manage stimuli (Callis, 2020), the registered nurses caring for LEP patients during the COVID-19 pandemic interviewed in this study employed several means of creating opportunities for positive patient outcomes. Following the surge of patients during the COVID-19 pandemic, nurses in their respective units were faced with new and difficult circumstances in managing a population who lacked the capability of communication without some means of translator services. Using integrated responses, nurses need to be able to create opportunities using resources given to them by their respective health systems to positively manage needed compensatory mechanisms (Callus, 2020). Registered nurses in this study explained their experiences in using resources and giving feedback as to the effectiveness of three types of their healthcare system sanctioned translation mediums: in-person, video, and phone. With the review of their impressions of the effectiveness of each of these mediums for communication, the registered nurses demonstrated the ability to change their practices and adapt to the limited resources available to them, or the perceived lack of engagement for mediums with patients, and find new methods for enabling effective communication with their patients such as requesting frequently asked question reference cards, using Google translator, body language/charades/pantomiming, and using family members as interpreters. This was similar to the findings found in the literature review in which adaptive communication methods of nurses included flashcards with pictures, Google translator, charades, and using family members as interpreters (see Galinato et al., 2016). Use of family members as translators was found in all seven participants, and although this is higher than the findings of previous researchers, it demonstrates a consistent use of available resources used by registered nurses needing to communicate with their patients (see White et al., 2018).

Education of self is an important mechanism for Orem's SCDNT as it allows for the self-management of a patient's health without the supervision of health professionals (Zhizhpon-Quinde et al., 2021). As noted by Chipu and Downing (2020), an aspect of pandemics is self-care which can be complicated as the needed information for a healthy lifestyle can become confusing when mediums such as social media, broadcast networks and attempts at self-education through internet searches are used for self-education. The onset of the COVID-19 pandemic brought with it an infodemic, which greatly complicated not only the LEP communities' ability to find information regarding a novel and evolving virus, but also the ability for healthcare professionals to give specific and easy to follow references for all patients to find information regarding self-care (Shah et al., 2021). Nurses caring for LEP patients in this study found similar mixed messages regarding where to advise their patients to find accurate and easily accessed information, complicated by available technology resources and literacy. The additional consideration for individual nurses to not have the ability to vet information sources in another language was also brought forward. Franco et al., (2020) noted anxiety and uncertainty regarding best practices for prevention and control of COVID-19, including mask wearing and 6-foot distancing. This study's findings had participants recalling their patient's experiencing anxiety and uncertainty as well, with specific mentions regarding the availability and proper use of face masks. Multiple participants of this study brought forward reports from patients regarding workplace conditions which did not promote or follow CDC guidelines for transmission preventative methods such as 6-foot distancing and staying at home when sick, potentially creating significantly higher COVID-19 rates associated with LEP populations as suggested by Fielding-Miller et al. (2020).

Use of the journey to health and well-being model helped to contribute to my overall understanding of the complexities nurses face in caring for LEP patients diagnosed with COVID-19, specifically the four stages of pathway construction: culture, acquisition of health information, decision to alter behaviors, and resultant health and well-being (see Rowlands et al., 2017). Three of these stages, culture, acquisition of health information, and decision to alter behaviors, were identified by this study's participants, however it should be noted that resultant health and wellbeing could not effectively be commented upon as the participants would not be able to see resultant behavior modifications due to visitor restrictions implemented as part of COVID-19 transmission precautions.

Differences in understanding COVID-19 symptoms, prevention behaviors, accessing and understanding government messaging, rating social distancing as unimportant, and misinformed beliefs regarding vaccinations have increased rates when comparing LEP and English-speaking populations (McCaffery et al., 2020). Each of these individual factors were supported by the participants of this study. One participant expressed a concern that the education available for vaccinations would not be adequate for this vulnerable population, further leading to offset infection rates and subsequent health complications.

Available resources to be used were also bilingual staff who were able to assist in translation or to assist in reducing the negative aspects of isolation due to the implementation of no visitation by family members within the health organization. Ali and Johnson (2016) reported nurses were encouraged by positive responses from patients and family members when bilingual staff were employed in assisting with education. While most nurses in the research done by Ali and Johnson (2016) had little knowledge of their organization's language and interpretation policies, nurses in my study were well aware that their organization did not condone the practice of using bilingual staff for translation yet continued to use this available resource to create the opportunity to communicate with their patients.

Due to the severity and rapid decline in patient condition secondary to complications of the COVID-19 virus, determination of increased transfers to intensive care units, as found by Hartford et al. (2019), were not available; however, the impression by multiple participants of this study was that patients with LEP were more likely to delay care and thus present with more advanced symptoms. Several participants of this study did not support findings of other researchers that care delivered to English proficient patients was different from LEP patients (see White et al., 2018). However, some participants brought forward a reluctance from healthcare providers to use or wait for sanctioned translation services when communicating information to LEP patients.

Limitations of the Study

There were limitations to this study. As predicted in Chapter 1, a limitation of this study was in the selection of only registered nurses for participants. Excluding CNAs and translators from this study limited the experiences of healthcare workers to a highly clinical viewpoint. Choosing participants from multiple areas throughout the healthcare setting also became a limiting factor as a difference in the experiences of nurses was noted in the coding of Table 1 in Chapter 4. As with many qualitative studies, the size of participants can be viewed as a limiting factor, although the use of seven participants was supported from a systematic review of qualitative studies by Vasileiou et al., (2018). It should be noted that I believe thematic saturation was reached prior to interviewing all seven participants. Recruitment for the study was made primarily from one hospital system, and all participants worked in the same geographic region. Additionally, all participants were speaking from the experience of having cared for only one language group, that is Spanish speaking patients. The use of a snowball technique could be identified as a limitation in that it allowed for an interconnected group of individuals to be contacted. The snowball technique also allowed for bias from me in selecting who to contact and by what means. I did my best to avoid this by contacting everyone who had an associated means of contacting them, such as phone number or email.

Recommendations

From the findings of this study there are several recommendations to be made for additional research into the exploration of how health literacy influences healthcare access. The initial recommendation to be made for future studies is to find a means to determine how information is conveyed to the target population, and then to determine if that method of transmission is effectively received. While some participants hinted as to methods they believed were in place, it can be assumed that this was not a part of their conversation when interacting with patients of the target population for this study.

Expansion of participants to include CNAs could improve the understanding of the patient perspective of the healthcare experience This was noted during the convenience selection recruiting phase and by this study’s participants in the snowballing recruitment phase. There were strong suggestions that involving CNAs would likely give additional participants who had the benefit of speaking with patients for a longer period of time, on a more intimate level, and had less deadline time constraints such as medication administration, admission assessments, and response to changes in patient conditions which may pull them away from conversations with patients. Additionally, because many CNAs who were suggested as participants spoke Spanish and also self-identified as Hispanic, they could have a deeper understanding of the culture and heritage of their patients, thereby understanding what was important to the patients and their families.

This said, utilization of registered nurses as participants gave a strong understanding of their experiences during the outset of the COVID-19 pandemic when working with LEP diagnosed with the disease. While the study was thematically saturated, each nurse gave interesting insights from their own unique position and perspective when caring for this population group. Largely these insights were outside the scope of the study’s intent, yet they were heartwarming overall and showed the dedication and compassion of these caregivers and healthcare providers. Tailoring the group of nurses to more specific phases of patient care could likely yield a less diverse but more in depth understanding of the nursing experience. There were inconsistencies noted between nurses who worked in the same department, hospital or healthcare system, such as the availability of in-person translators (some nurses believed they were not allowed in the building, while others stated they were only not allowed in a COVID-19 positive patient’s room) and the availability of video translator devices (varying from one to three on a unit). Also, referencing Table 1 should give guidance on the experience of nurses who were caring for a patient for their entire shift as opposed to nurses who were caring for patients for a shorter duration.

A readable media was not employed for this study as the initial response to the topic at hand was met with such strong reception that it was not deemed necessary. In hindsight, a medium to attract participants passively should be employed to ensure that all nurses who qualify under inclusion criteria are reached, rather than just those who are connected to one another through a snowballing technique. This medium could also be sent out to facilities blindly, thus expanding the possibility for a more diverse group of participants, and thereby having a greater base of nursing experience.

While one of the strengths of this study was the narrow geographical area, expansion could have several benefits and some detractors. The greatest strength would be broad exposure to multiple cultures and practices of varying demographic groups. This would very likely require a larger group of participants to ensure singular exposures were not representing the whole. Also, broadening the exposure area could bring in new ideas to alleviate problems which may present as universal complications secondary to language discordance during a pandemic. A detraction would be lack of focus to a specific population, whereas so many different demographic groups were represented that conflicting information would be brought forth, and the introduction of participant bias may present.

Focus groups may provide a better platform for the exchange of ideas and recollections when investigating this phenomenon of interest. Interviewing multiple participants as a focus group could avoid having the same experience told multiple times in separate interviews, and allow for more time and energy to be spent on problem identification and resolution.

Implications

Having the support of the literature review for this study's finding, it is important to speculate on the possible implications that this study might have. Although the LEP patients brought forward from the nurse's experiences were all Spanish speaking, it is important to consider the application of this study's findings to other languages in the face of discordance between patients and the health systems serving them and their communities.

Positive Social Change

Having the experiences of registered nurses who have cared for LEP patients diagnosed with COVID-19 can assist anyone who is seeking to decrease the negative influence of language discordance for either the healthcare provider or patient and their family. As identified in Chapter 2, LEP patients have been shown to have greater difficulties in managing health systems, have greater negative health outcomes, and decreased satisfaction in healthcare interactions. Utilizing the experiences of registered nurses in this study, it can be expected that patient surges from unanticipated infection rates during a pandemic will predictably overcome the resources allocated prior to the pandemic. And from the experiences brought forward in this study, nurses can be expected to make do with the resources they have on hand, and try to supplement the gap caused by language discordance with alternative methods.

Practice

Potential practice changes from this study's finding can have real life applications, some with minimal financial requirements. One participant brought forward the lack of food from the cafeteria which patients would find appetizing due to cultural differences. Their solution was to have families bring in food from home, which was obvious in its positive effect for the patients' completion of meals. With this in mind, application towards any culture, regardless of language, regardless of minority or majority status, can be put forward by organizations to ensure if there are food options available for their patients, and that alternatives are examined and offered. With the possibility of patients not realizing they have options for food delivery, the alternative is for lack of adequate dietary intake despite availability of calories and nutrients.

Organizations

One key refrain from many participants in this study was the inadequate amount of available video translation devices. Many times these devices were not kept in the department and had to be borrowed from another, were so few in number that they were lost among patient rooms, used for patients with more serious conditions, or needing to be used at the same time, such as during morning assessments. Finding the appropriate number of resources to enable nurses to perform their daily tasks would be of great benefit and reduce the repeated reports of frustration encountered by nursing staff and patients. This should be considered in alignment with meeting Executive Order 13166. And while a healthcare system cannot be expected to meet demands of sudden local patient surges, there should be a mechanism in place to ensure resources are adequate to meet national trends. This could be viewed as an area of weakness within healthcare management as forecasted in Chapter 1.

Communities

Communities can find positive social change from this study. One of the key points found was the lack of knowledge regarding the location and means of where LEP patients garnered information about the COVID-19 pandemic. It can be assumed that there are methods in place to educate LEP communities regarding changes in healthcare concerns. Attention should be made to ensure individuals are receiving this information and have the capability to apply it with their resources and living conditions. Discharge instructions should have information regarding prevention and symptom recognition for all epidemics and pandemics which are influencing the health of communities served by healthcare systems. Education should be provided to ensure this is a service provided by healthcare systems.

Education can be provided to organizations within LEP communities to ensure that patients and their families understand what can be expected when being admitted to a healthcare system. Churches and communal centers can have this information made available to them so when one of their members is admitted an outreach can be made to better educate patients on what they should expect to be the norm. Similar to “Gel in, Gel out”, patients can be allowed to ensure practices are upheld, such as having translation services available and when they are indicated. Understanding the need to remain in contact with family, friends, and loved ones should be strongly encouraged, especially when visiting limitations are in place. Similar to organizing food trains, community organizations can enact a phone call per day from their members to patients to ensure there is some outside contact.

Conclusion

In conclusion, the literature review performed in Chapter 2 had many key points which were found in this study which gives validity not only to those matching findings, but also other findings as well. The four themes found in the experiences of nurses caring for LEP patients diagnosed with COVID-19 were supported by literature reviews: nursing compassion, patients and their families, communication challenges, and barriers to care. More work is needed to be done in these areas as the problems still exist in multiple healthcare systems evaluated in this study. Positive social change can be brought about from this study, and it is important to engage communities and patients in the understanding of what is important during visits to healthcare institutions and ways to mitigate effects of long-term stays.

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Appendix A: Interview Questions

1. What department do you work in and what is your role there?
2. How many times do you interact with individuals who have a limited level of English language proficiency? (daily, weekly, monthly?)
3. When interacting with limited English proficiency patients, how do you judge if communication is effective? [For example, how do you determine if the message you are trying to get across is being received as you intend?]
    a. If communication is not effective, what course of action do you take?
        i. What enables this to take place?
        ii. What barriers are there to this taking place?
4. What is available to assist you when there is language discordance with patients?
5. What are some of the difficulties you have witnessed in effective communication with limited English proficient patients?
6. What were some of the challenges you experienced while taking care of patients with limited English proficiency during 2020?
7. What examples of the overall health care management of limited English proficiency patients have you seen which are due in part to language differences between healthcare providers and patients?
8. For patients diagnosed with COVID-19, what influenced their actions regarding transmission precautions and treatment?
9. What were some of the ways you saw your coworkers dealing with or adapting to meet the needs of limited English proficiency patients?

10. What should I have asked you that I didn't think to ask?