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Rural care Registered Nurses' interpretation of health literacy and its effect on patient care

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RURAL CARE REGISTERED NURSES’ INTERPRETATION OF HEALTH LITERACY AND ITS EFFECT ON PATIENT CARE

A Dissertation
Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The School of Human Resource Education
And Workforce Development

by
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May 2007
This work is dedicated to my children, Elizabeth, Christopher, and Alexander. This dissertation would not have been possible without your continuing love, encouragement and support. I hope this educational achievement will inspire you to reach for your dreams through commitment, discipline and very hard work. I Love You and Thank You.
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ABSTRACT

The purpose of this phenomenological qualitative study was to describe rural care Registered Nurses’ interpretation of health literacy and its effect on patient care. Individuals who do not understand their disease and have poor management skills are at risk for low health literacy. The consequences of limited health literacy are poor healthcare outcomes and higher healthcare costs. Implications from this study are useful in educating practicing Registered Nurses in the development of the necessary skills to empower patients to actively participate in their healthcare. Education about health literacy should begin in grades Kindergarten through 12th, with the primary focus being on the development a personal definition of health and wellness.

A phenomenological lens was used to examine the data collected in this study. Interviews were conducted with Registered Nurses working in a rural acute care setting. Data analysis was conducted according to Moustakas’s (1994), Van Kaam Method. The following themes emerged: health literacy, relationships, participatory decision-making, and empowerment.

Findings from this study revealed that rural care Registered Nurses had limited knowledge of health literacy and were not aware of available health literacy assessment tools. Most of the participants in this study utilized nurse developed tools which assessed the literacy level of patients instead of health literacy and thus influenced their relationships with their patients. The majority of participants did not have an understanding of the essential relationship that exists between a patient’s health literacy and the patient’s participation in their own healthcare. There were limited examples that nurses were encouraging their patients to engage in
participatory decision-making. Therefore empowerment of patients did not emerge from the study.

Additional qualitative and quantitative research studies are needed in rural and urban healthcare settings which explore practicing Registered Nurses’ understanding of health literacy. Replication of this phenomenological study is essential in the urban acute care setting in order to determine if the findings of this study are consistent. Future research is also needed to evaluate the nurse-patient relationship in terms of health literacy, participatory decision-making and empowerment.
CHAPTER 1

INTRODUCTION

Health literacy is having a major impact on individuals and the United States healthcare system. The concept of health literacy implies the ability of an individual to read medical information in the healthcare setting. Health literacy also implies the ability of an individual to understand and function in the healthcare system. Various definitions of health literacy are noted in the current literature. Weiss (2003) defined health literacy as “…the ability to read, understand, and use health information to make appropriate healthcare decisions and follow instructions for treatment” (Weiss, 2003, p. 6). The Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs of the American Medical Association (1999) defined health literacy as, “A constellation of skills, including the ability to perform basic reading and numerical tasks required to function in the health care environment” (p. 553). Additionally, the Institute of Medicine defined health literacy as an individual’s ability to obtain, process and understand basic healthcare information and the services required to make appropriate health decisions. (Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs, 1999).

Registered Nurses (RNs) are often the first healthcare professionals a patient encounters in a healthcare setting. It is important for RNs to have an awareness of a patient’s health literacy and be able to appropriately assess a patient’s health literacy.

Healthcare professionals in the United States first became aware of the prevalence of low health literacy skills in the aftermath of the 1992 National Adult Literacy Survey (NALS) which was conducted by the Department of Education (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993). This was the first attempt to construct a complete profile of adult literacy that included prose, document and quantitative literacy in the United States (Parker, Baker, Williams, & Nurss,
1995). Low literacy skills of adults are now considered to be a social problem which threatens the health and well being of the United States (Kirsch et al., 1993). The results of the NALS were categorized into five levels of literacy, with the lowest range of scores categorized as Level one and the highest as Level five. Adults with a Level one literacy rating may not be able to read a label on a prescription bottle, follow written instructions from a pediatrician regarding health care of a child, or read a business card from a physician indicating the date of a follow-up appointment (National Workgroup on Literacy and Health, 1998). Adults with a Level five literacy rating had high literacy and indicated they had the ability to perform more complex literacy tasks. The NALS literacy scores of at least 40 million Americans fell within the Level one category (Kirsch et al., 1993). According to this study health literacy is prevalent in adults in the United States and RNs should have an awareness of every patient’s health literacy.

The significance of the NALS report prompted a follow-up study titled, the *Health Literacy of America’s Adults, Results from 2003 National Assessment of Adult Literacy* (National Center for Education Statistics, 2006). The Department of Education reported the literacy assessment levels of the adults in the study as: below basic, basic, intermediate, and proficient. The report concluded the majority of adults in United States had intermediate health literacy and over 75 million adults combined had below basic and basic health literacy which placed them in the at-risk category. Adults age 65 or older had lower average health literacy scores than adults in younger age groups. A higher percentage of adults who had not attended or completed high school had below basic health literacy than adults with higher levels of education. Additionally, the report found that adults who report higher health literacy levels consistently report better overall health. It is essential that RNs understand the health literacy of America’s adults because
“so many aspects of finding healthcare and health information, and maintaining health, depend on understanding written information” (National Center for Education Statistics, 2006, p. 6).

The Louisiana State Adult Literacy Survey, a component of the 1992 National Adult Literacy Survey, reported that 24% to 26% of participants scored at Level one (Jenkins & Kirsch, 1994). In response to this report, the Louisiana legislature passed Louisiana House Bill No. 2019 during the 2003 Regular Session which created a statewide task force to address health literacy issues. The purpose of the task force was to improve access to healthcare, reduce unnecessary spending, and improve healthcare outcomes of the citizens of Louisiana (Glover, Jackson, & Katz, 2003). The assessment of a patient’s health literacy is a primary concern for RNs in Louisiana.

The NALS, the Health Literacy of America’s Adults, Results from 2003 National Assessment of Adult Literacy, and the Louisiana State Adult Literacy Survey all provided valuable information on the state of adult literacy in America. The interest in how healthcare professionals could effectively address this issue increased, and health literacy was incorporated into a national health platform outlined in Healthy People 2010 (Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2000). Many professional organizations and governmental agencies have focused their efforts to increase the awareness of health literacy among healthcare professionals.

The American Medical Association (AMA) has addressed the social problem of health literacy in the United States by developing a program titled, Health Literacy: A Manual for Clinicians. This program recognizes the importance of educating physicians on health literacy as well as other healthcare professionals (Weiss, 2003). Registered Nurses have join the medical
profession in the awareness and assessment of patients’ health literacy in order to improve health outcomes for patients.

Today, healthcare is more complex, requiring a patient to have adequate health literacy knowledge and skills. Patients are experiencing shorter office visits and not having adequate time to communicate with their physicians (Davidoff, 1997). Because patients are experiencing short time periods with their physicians, one study suggested the patient should be placed in the center of the healthcare system and that the system should revolve around the patient (Berry, Seiders, & Wilder, 2003). By placing the patient in the center of the healthcare system this would give the patient access to health literacy knowledge and skills. This would empower the patient to be actively engage in their healthcare with healthcare professionals. Registered Nurses are often the first healthcare professional a patient encounters and most of a patient time is spent with them. Registered Nurses provide the majority of healthcare information and teaching to patients. Today, patients are required to monitor their disease, utilize the proper healthcare facilities, and regulate their treatments and medications (Parker, Baker, Williams, & Nurss, 1999). Patients who have inadequate health literacy have great difficulty navigating the healthcare system (Fetter, 1999). Health literacy is a patient’s currency for understanding and utilizing this system (Parker et al., 1999). Registered Nurses must be able to accurately assess a patient’s health literacy in order to ensure they have the optimal currency for understanding and navigating the healthcare system (Parker et al., 1999).

**Problem Statement**

The purpose of this research study was to explore rural care Registered Nurses’ interpretation of health literacy and its effect on patient care.
**Definition of Terms**

For the purposes of this study, the following terms were operationally defined:

**Registered Nurse (RN).** A professional nurse who has graduated from an accredited school of nursing, passed the professional nursing (RN) state board examination, and has been granted a license to practice within the state of Louisiana (Venes, 2005).

**Health Literacy** is “the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health” (WHO, 1998, p.210). Nutbeam (1998) expanded on this definition stating “health literacy means more that being able to read pamphlets and successfully make appointments. By improving people’s access to health information and their capacity to use it effectively, health literacy is critical to empowerment” (Nutbeam, 1998, p. 357; Nutbeam, 2006, p. 264).

**Nursing Process.** Is an interactive problem-solving process performed by a RN as a systematic and individualize way to fulfill the goals of nursing care. It includes the following phases: Assessment, Nursing Diagnosis, Planning, Implementation and Evaluation (Venes, 2005).

**Rural Acute Care Setting.** A hospital in rural southern Louisiana which provides care and services to select patient groups, individuals or adults, that have acute and specialized health care needs (Venes, 2005).

**Limitations**

1. The research findings of this qualitative study were not generalizable because of the use of a purposeful sample.

2. The researcher is a registered nurse and may have unknowingly influenced the participants who are registered nurses.
Significance of the Study

Today, patients need to quickly understand healthcare information because of the limited time with healthcare providers and the increase in outpatient services. Also, patients now must be able to effectively evaluate healthcare information from multiple sources and become an advocate for their own health. A patient’s health literacy skills directly impact their healthcare status and quality of life. Boswell, Cannon, Aung, and Eldridge (2004), stated that a patient’s low health literacy is a significant challenge that is not fully understood nor currently considered by practicing RNs. A Registered Nurse has an ethical responsibility to provide healthcare information that is understandable and enables a patient to make informed decisions regarding their healthcare (Gazmararian, Curran, Parker, Bernhardt, & DeBuono, 2005; Nutbeam, 2000). The ability of RNs to be aware of and accurately assess a patient’s health literacy status is fundamental. The results from this phenomenological study will contribute to the body of knowledge on health literacy.
CHAPTER 2

REVIEW OF THE LITERATURE

Definitions of Health Literacy

Today there are several definitions of health literacy as many experts in the field do not agree on a single one. The fact remains that health literacy is a concept that all healthcare practitioners must understand in order to provide safe and competent patient care. A review of healthcare literature reveals a variety of definitions for health literacy. Weiss (2003) defined health literacy as, “…the ability to read, understand, and use health information to make appropriate healthcare decisions and follow instructions for treatment” (p. 6). The Institute of Medicine defined health literacy as “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions” (Committee on Health Literacy of the Institute of Medicine, 2004, p. 8). The Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs of the American Medical Association (1999) defined health literacy as “a constellation of skills, including the ability to perform basic reading and numerical tasks required to function in the health care environment” (p. 553). Additionally, the World Health Organization (WHO) (1998) defined health literacy as “the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health” (p. 210). Nutbeam (2006) expanded on this definition stating “health literacy means more that being able to read pamphlets and successfully make appointments. By improving people’s access to health information and their capacity to use it effectively, health literacy is critical to empowerment” (p. 264; Nutbeam, 1998, p. 357). All of these definitions suggested that health literacy is an individual’s ability to read healthcare information, understand numbers in
healthcare, understand healthcare treatment, and be empowered to make appropriate healthcare decisions.

**Reports on Literacy and Health Literacy**

The term health literacy was first used in a 1974 paper titled *Health Education as Social Policy* (Sigmonds, 1974). This term was discussed as a policy issue which affected the healthcare system, the educational system, and mass communication. At this time health literacy was linked to health education, and failures in health education were related to poor health literacy (Ratzan, 2001). This focus did not allow for issues such as culture, contextual situation, and individual needs.

Today, health literacy has a broader focus; it encompasses issues such as culture, individuality, and contextual situations. It influences how individuals understand wellness and illness, participate in health promotion and health prevention activities, follow treatment regimes and self-care instructions. Osborne (2005) stated, “health literacy is essential throughout the entire continuum of care” (p. 2). Health literacy is different from literacy which is the basic ability to read and write. Yet both health literacy and literacy are linked in that “most individuals with limited general literacy also have limited health literacy” (Schwartzberg, VanGeest, & Wang, 2005, p. 18).

The study of health literacy emerged out of several literacy studies at the federal and state level. The 1992 National Adult Literacy Survey (NALS) was the first study conducted by the United States Department of Education on adult literacy. This comprehensive report identified a high level of poor literacy in the United States (Kirsch et al., 1993). The results were categorized into five levels of literacy, with the lowest of scores as a level one and the highest as a level five literacy rating. A level five score indicated that an individual had the ability to perform more
complex literacy tasks. A level one literacy score indicated that an individual had great difficulty performing basic literacy tasks. The NALS literacy scores of 40 million Americans fell within the level one category (Kirsch et al., 1993) indicating that they have severe problems performing basic literacy tasks.

A component of the 1992 NALS was the Louisiana State Adult Literacy Survey (LSALS) which found that 24% to 26% of adults in Louisiana scored at literacy level one (Jenkins & Kirsch, 1994). Following the LSALS report several other studies indicated a possible relationship between literacy and health literacy (Foster et al., 1992; Schillinger et al., 2001). This prompted the Louisiana legislature to pass House Bill No. 2019 during the 2003 Regular Session which created a statewide task force to address health literacy issues. Members of the task force included a variety of healthcare professional (nursing, pharmacy, and medicine), the Developmental Disabilities Council, the Minority Health Commission, and the health insurance industry. The purpose of this task force was to improve access to healthcare, reduce unnecessary spending, and improve healthcare outcomes for the citizens of Louisiana (Glover et al., 2003).

A follow-up federal study to the 1992 NALS report prompted an additional study titled the Health Literacy of America's Adults, Results from 2003 National Assessment of Adult Literacy (National Center for Education Statistics, 2006). The Health Literacy of America’s Adults, Results from 2003 National Assessment of Adult Literacy focused on health literacy and not literacy. In 2006 study they utilized a scale interval describing adults’ health literacy levels as below basic, basic, intermediate, and proficient. The report concluded the majority of adults in United States had intermediate health literacy, but over 75 million adults together had basic and below basic health literacy levels placing them at risk category. The study revealed adults 65 years and older had lower average health literacy scores than adults in younger age groups. It
also indicated that a higher percentage of adults who had not attended or completed high school had below basic health literacy scores than adults with higher levels of education. Also this study found adults receiving Medicare or Medicaid or who had no insurance had lower average health literacy than adults with private insurance. The adults with private insurance had the highest average health literacy level. Additionally, the report found that adults who reported higher health literacy levels consistently reported better overall health. It is essential that RNs understand the health literacy of America’s adults because “so many aspects of finding healthcare and health information and maintaining health depend on understanding written information” (National Center for Education Statistics, 2006, p. 6).

Several professional organizations have explored health literacy in the United States. The Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs of the American Medical Association (1999) is a panel of experts in fields of medicine, nursing, health research, psychology, adult literacy, and health education. In 1998, they identified the scope and consequences of poor health literacy and concluded that an individual’s functional health literacy is significantly worse than his/her general literacy skills. Healthcare practitioners must perform an appropriate assessment of a patient’s health literacy level and not just assume it to be the same as their literacy level.

The current United States Surgeon General, Dr. Richard Carmona has identified three public health priorities for the 21st century which are health prevention, public health preparedness, and eliminating healthcare disparities (Office of the Surgeon General, 2004). Carmona stated, “One of my primary goals is to increase health literacy in the United States” (Mattson, 2005, p. 15). He believed that improving a patient’s health literacy can save lives,
improve healthcare, and decrease healthcare costs (Mattson, 2005). The first step to eliminating healthcare disparities is for healthcare practitioners to improve a patient’s health literacy.

Other federal agencies have written healthcare policies to address health literacy. The Department of Health and Human Services (DHHS) and the Office of Disease Prevention and Health Promotion (2000) established goals for health prevention titled *Healthy People 2010* (DHHS Office of Disease Prevention and Health Promotion, 2000). One goal of *Healthy People 2010* is to improve health communication and health literacy by increasing awareness in healthcare professionals and healthcare agencies. Healthcare professionals and agencies in the United States have incorporated this goal into patient care.

In 2004, the Institute of Medicine (IOM) of the National Academies Committee on Health Literacy published a study entitled, *Health Literacy: A Prescription to End Confusion* (Committee on Health Literacy of the Institute of Medicine, 2004). They reported that 90 million adults have trouble understanding and acting on health information. The committee stated that healthcare information must be simplified and more attention given to an individual’s culture and language. Additionally, they reported a key ingredient to healthcare is the implementation of patient involvement and quality standards. The report called for health literacy education to begin in grades Kindergarten through 12th and continue with adult education. They also found that healthcare providers have, “…limited education, training, continuing education, and practice opportunities to develop skills for improving health literacy” (Committee on Health Literacy of the Institute of Medicine, 2004, p. 11). “Increasing knowledge, awareness, and responsiveness to health literacy among health service providers as well as the community would reduce problems of limited health literacy” (Committee on Health Literacy of the Institute of Medicine, 2004, p. 2).
patient education standards stated that a patient must be given health information that they can understand. All healthcare agencies are required to provide health instructions that are appropriate for the needs of each patient. Additionally, these healthcare instructions must consider the patient’s learning needs, cultural and religious preferences, and abilities (JCAHO, 2005). As a result of these patient education standards, healthcare agencies are increasing their awareness of health literacy.

Several organizations are actively publishing health literacy information for healthcare practitioners. These include the American Medical Association (AMA) and the Partnership for Clear Health Communication (PCHC). The AMA developed the program, Health literacy: A Manual for Clinicians (Weiss, 2003). The AMA has recognized the importance of educating physicians on health literacy and has advocated for health literacy training to begin in medical school (AMA Foundation, 2005). The PCHC, which consists of 19 partners including the American Nurses Association, is sponsored by Pfizer and is actively promoting national health literacy awareness. The primary goal of this coalition is to increase health literacy awareness among healthcare consumers and providers (Partnership for Clear Health Communication, n.d.).

**Prevalence of Low Health Literacy**

Paasche-Orlow, Parker, Gazmararian, Nielsen-Bohlman, & Rudd (2005) reviewed 85 quantitative research studies in the United States and pooled the analyses of data which revealed that over 25% of subjects had low literacy and 20% had marginal health literacy. This review summarized the “prevalence of health literacy skills in American adults as depicted by reports in the medical literature” and revealed that education, ethnicity, and age are associated with low health literacy (Paasche-Orlow et al. 2005, p. 182). Quantitative studies reported that health
literacy is associated with education level and age (Artinian, Lange, Templin, Stallwood, & Hermann, 2001; Beers et al., 2003; Gazmararian et al., 1999; Williams, Baker, Honig, Lee & Nowian, 1998; Wilson, Racine, Tekieli & Williams, 2003). Additionally, several quantitative research studies have reported health literacy is associated with ethnicity (Artinian et al., 2001; Bennett et al., 1998; Beers et al., 2003; Foltz & Sullivan, 1996; Gazmararian et al., 1999). Still other research studies reveal geographic location and income as common demographic characteristics associated with health literacy (Al-Tayyib, Rogers, Gribble, Villarroel, Turner, 2002; Artinian et al., 2001; Gazmararian et al., 1999). According to these numerous studies, individuals who are at risk for low health literacy are those with or without a high school education, of an ethnic or minority group, over the age of 65 years, reside in the Southern United States and have a low yearly household income. The Health Literacy of America’s Adults, Results from 2003 National Assessment of Adult Literacy, confirmed these findings related to age and education (National Center for Education Statistics, 2006). They reported adults age 65 or older had lower average health literacy scores and a higher percentage of adults who had not attended or completed high school had below basic health literacy scores (National Center for Education Statistics, 2006).

The NALS (1992) study examined the literacy levels of American adults. The study reported a direct correlation between years of education and literacy levels in subjects. It also indicated that a subject’s educational level was not an accurate profile of their reading level, as 16% of subjects with Level One literacy skills had completed high school. Additionally the study reported that subjects over 65 years had the highest percentage of Level one literacy scores, and that low literacy was more prevalent among racial and ethnic minorities. However, 14% of white, native-born Americans demonstrated Level one literacy skills (Kirsch et al., 1993).
Schwartzberg, et al. (2005), stated “Expectations and assumptions about average skills may account for a mismatch between people’s actual skills and health system processes and procedures” (p. 72). They continued to discuss how many healthcare professionals assume patients understand their basic bodily functions, location of organs, and the systems of the human body. This type of information is not routinely taught in kindergarten through 12th grade educational systems, and the majority of Americans would not have general knowledge of this (Schwartzbert, et al. (2005). These are common healthcare assumptions present today. RNs and healthcare professionals should perform a careful assessment of a patient’s health literacy and avoid making assumptions.

**Health Literacy Impacts Health Outcomes**

The Literacy and Health Outcomes: Evidence Report by Agency for Healthcare Research and Quality (AHRQ) examined several studies regarding the relationship between low literacy and adverse health outcomes (Berkman et al., 2004). The purpose of this report was to inform healthcare practitioners and health policy makers about literacy and health. The report found that patients with low literacy had poorer health outcomes, health knowledge, intermediate disease markers, and measures of morbidity, poorer health status and poorer use of health resources.

DeWalt, Berkman, Sheridan, Lohr, and Pignone (2004), conducted a collaborative systematic review of research studies that examined the following key questions: “Are literacy skills related to the use of health care services?; Are literacy skills related to health outcomes?; Are literacy skills related to the costs of health care?; Are literacy skills related to disparities in health outcomes according to race, ethnicity, culture, or age?” (p. 1230). The 73 research studies examined measured a subject’s literacy most often by the REALM followed by the S-TOFHLA
or TOFHLA, and then the WRAT. Overall the review found that low health literacy is associated with several adverse health outcomes and “when unrecognized presents a barrier to effective care” (DeWalt et al., 2004, p. 1238).

One study identified a positive relationship between a subject’s reading ability and their knowledge of health services or health outcomes (Davis et al., 1996). It further stated that a patient with a low literacy level is not as aware of healthcare services or outcomes. Another study found that elderly Medicare enrollees with low literacy levels had a lower chance of never having had a Pap smear or mammogram in the past two years than patients with higher literacy levels (Baker et al., 2002). These same patients with low literacy reported not receiving influenza and pneumococcal immunizations compared to patients with higher literacy levels (Baker et al., 2002). This indicates that patients with low literacy may not utilize preventative healthcare services.

Other studies reported that low literacy levels are significantly associated with an increased risk of a patient hospitalization (Baker, Parker, Williams, & Clark, 1998; Baker et al., 2002). Several studies reported a positive relationship between literacy levels and health behaviors in managing a chronic disease which include diabetes, hypertension, depression, and prostate cancer. Schillinger et al. (2002) reported a relationship between reading ability and glycemic control for diabetic patients from a public hospital. Patients with a lower reading ability had a lower glycemic control compared with patients with higher reading ability. Another study reported a positive relationship between reading ability and hypertension (Williams, Baker, Parker, & Nurss, 1998). They found patients with low literacy levels had higher systolic blood pressures than those with higher literacy levels. Another study found a relationship between reading ability and depression (Gazmararian, Baker, Parker, & Blazer, 2000). Medicare managed
care patients using the Geriatric Depression Scale were more depressed than patients with higher literacy levels. This study indicated depression affects the health status of patients. Another study evaluated the relationship between a patient’s reading ability and initial state of presentation of prostate cancer (Bennett et al., 1998). They found men with low reading levels initially seeking healthcare treatment presented with late-stage prostate cancer and men with higher reading levels presented with early-stage prostate cancer. A patient’s health literacy skills directly impact their healthcare status and quality of life. The ability of RNs to understand a patient’s health literacy and accurately assess it is fundamental to providing safe and competent care.

Several researchers have investigated the relationship between health literacy and poor health outcomes among individuals with limited literacy skills (Weiss, Hart, McGee, & D’Estelle, 1991; Foster et al., 1992; Schillinger et al., 2002). These studies have indicated that low literacy individuals have less knowledge of their health conditions and treatments, have lower self-management skills, and have higher rates of chronic illnesses. Overall, patients who have low health literacy also experience poor recall and comprehension of healthcare advice and instructions, poor understanding of diseases, and poor problem-solving skills (McCray, 2005).

Additionally, one study identified low health literacy as a primary barrier to health screenings and care for women (Lindau et al, 2001). The study found that women with low health literacy are less likely to participate in health screenings and enter the healthcare system for treatment later with advanced cervical cancer. The authors commented that public health efforts which target increased screening awareness for women often fail to reach the at risk low literate populations.

Williams, et al. (1998) conducted a quantitative study that compared the health literacy of individuals with hypertension and diabetes to the knowledge about their diseases. They
discovered that approximately half of subjects with inadequate health literacy understood the important clinical signs required for their disease management. Schillinger, et al. (2002) reported that glycemic control was poorer for individuals with diabetes and poor health literacy skills. Individuals, who have both inadequate health literacy and a chronic illness such as diabetes or hypertension, are less likely to participate in their healthcare adequately to the extent needed for their disease management (Williams, et al., 1998).

Montalto & Spiegler (2001) conducted a study which focused on subjects from a rural population. They administered the Test of Functional Health Literacy in Adults (TOFHLA) to 85 rural clinic patients to determine their health literacy. The results indicated that 20% of the subjects had a literacy and numeracy deficit. The healthcare professionals utilized this information to modify their patient care.

The Agency for Healthcare Research and Quality conducted a systematic review of studies on health literacy. They recommended that more rigorous studies be performed in order to gain a better understanding of “whether inadequate literacy is the cause of adverse health outcomes or whether it is simply a marker for low socioeconomic status, poor self-efficacy, low trust in medical providers, or impaired access to care” (Berkman et al., 2004, p. 89).

**Health Literacy Assessment Instruments**

Instruments measuring literacy skills include two types: word recognition tests and comprehension tests (Davis et al., 1993). The Test of Functional Health Literacy in Adults (TOFHLA) is a comprehension health literacy test which measures both reading comprehension and numeracy, and is available in English and Spanish. It has been used extensively in health literacy research and requires approximately 22 minutes to administer (Mika, Kelly, Price, Franquiz, & Villarreal, 2005; Weiss, 2003). A modified version, Simplified Test of Functional
Health Literacy in Adults (S-TOFHLA) requires approximately seven minutes to administer (Baker, Williams, Parker, Gazmararian, & Nurss, 1999; Mika et al., 2005), and is practical for screening purposes in health care settings (Hartsell, 2005). During the administration of both the long and short version of TOFHLA, patients are provided with health care information such as a prescription drug label or medical consent form, and asked to respond to questions that assess their understanding of the materials (Mika et al., 2005; Weiss, 2003). The results are then categorized as inadequate, marginal, and adequate. The majority of health literacy studies utilize the S-TOFHLA and the TOFHLA.

Several instruments measuring literacy skills consisting of word recognition tests include: the Wide-Range Achievement Test (WRAT-3), the Peabody Individual Achievement Test-Revised (PIAT-R), the Slosson Oral Reading Test (SORT), the Cloze Method and the Rapid Estimate of Adult Literacy in Medicine (REALM) (Davis, Michielutte, Askov, Williams, & Weiss, 1998; Doak, Doak, & Root, 1996; Foltz & Sullivan, 1998; Quirk, 2000; Weiss, 2003). Early research studies on health literacy utilized several of these methods. However, today the REALM screening instrument is most frequently used because it can be administered quickly by healthcare providers (Foltz & Sullivan, 1998; Hartsell, 2005; Murphy & Davis, 1997). The advantage of REALM over WRAT-3 is it can help identify patients who have difficulty understanding common terms used during health care teaching. The short version requires a patient to read 66 commonly used medical terms and can be administered in two to three minutes (Davis et al., 1996). Two disadvantages of the REALM are that it is currently not available in Spanish, and the tool tests word recognition only, and not comprehension or numeracy skills (Foltz & Sullivan, 1998; Hartsell, 2005; Weiss, 2003).
The Nursing Process

RNs practice using the nursing process which directs and guides their patient care. Nursing process includes the following phases of assessment, diagnosis, planning, implementation and evaluation. These steps are incorporated into a written plan of care which is also called a nursing care plan (NCP). The NCP is the primary tool all nurses use in their practice. In assessment, the RNs systemically collect subjective data, objective data and relevant information to their patients, their problems, and needs. Next, RNs analyze and interpret the information obtained during assessment and determine a nursing diagnosis. Then, RNs determine individualized patient-centered goals and nursing actions. Next, RNs implement nursing actions which attempt to resolve the identified problems and achieve the patient-centered goals. Finally, in evaluation RNs continue to assess the effectiveness of the nursing plan in terms of the nursing goals and adjust the nursing interventions and goals as needed (Venes, 2005). The nursing process and NCP are central to RNs providing competent patient care. Assessment is the most important phase in this process. If RNs do not appropriately assess a patient then the nursing plan is incorrect and the patient care inadequate. RNs must be proficient in the assessment of a patient’s health literacy.

Factors Effecting Health Literacy

RNs need to conduct some form of health literacy assessment on all patients before providing care and health information (Foltz & Sullivan, 2005; Hartsell, 2005; Murphy & Davis, 1997). Several factors serve as obstacles to completing a health literacy assessment. Ninety million adults scored within the two lowest literacy levels of the NALS study, and most do not perceive themselves to be “at risk” (Kirsch et al., 1993). The majority of adults in the two lowest literacy levels described their ability to read or write English as “well” or “very well” (Kirsch et
Patients may not believe they have limited literacy skills and low health literacy which will impact a RNs ability to perform a patient assessment.

Factors which influence a health literacy assessment include a patient’s education and reading level. Several studies have compared the results from valid literacy screening instruments to the number of years of school an individual has completed. Results indicate that individuals read at least two grade levels below the literacy assessment score and some read as much as four to five grade levels below (Baker et al., 2002; Doak & Doak 1980; Davis et al., 1993; Fredrickson et al., 1995; Kirsch et al., 1993; Murphy, Chesson, Walker, Arnold, & Chesson, 2000; Parker et al., 1995; Williams et al., 1995; Wilson & Lemore, 1997).

Additional obstacles to completing an assessment of a patient’s health literacy are deficits in vision, hearing, and cognition. These impairments are common in the elderly population and often underreported (Friedman et al., 1999). Visual impairments and auditory deficits impacting a patient’s health literacy include: eye disorders, visual disturbances, eye injuries, conductive and sensorineural hearing loss, and presbycusis (Porth, 2007). Presbycusis is the degenerative hearing loss that occurs with age and effects 23% of patients between the age of 65 and 75 and 40% of patients older than 75 years of age (Saeed & Rasden, 1994). Approximately 13 million individuals have cataracts which cause visual problems and they occur in 50% of individuals between 64 and 74 years of age and 70% in those over 75 years (Solomon & Donnenfeld, 2003). Cataracts are the most common cause of visual loss in elderly patients.

Health care professionals often do not adequately evaluate the cognitive capacity of patients. Several diseases and conditions can effect a patient’s cognitive functioning which directly impacts their health literacy. These cognitive impairments include: Parkinson Disease (PD), brain injuries, cerebrovascular disease (CD), cerebrovascular vascular accident (CVA) or
stroke, infections of the central nervous system, brain tumors, seizures, dementias, and mental retardation. Paasche-Orlow, et al. (2005) reported that an incomplete cognitive assessment of elderly patients by healthcare practitioners can lead to an underestimation of their low health literacy. Baker, et al. (2002) examined the cognitive, health, and behavioral factors associated with functional health literacy among older adults. They found that low literacy levels in subjects are highly correlated with the Mini Mental State Examination (MMSE). This instrument is commonly utilized in healthcare practice to assess cognitive functioning (Baker et al., 2002). They also reported that gender, race, years of school completed, reading frequency, diabetes, mental health and vision were all independent predictors of the subject’s functional health literacy.

In the United States, 700,000 individuals are afflicted with CVA or strokes (American Heart Association, 2005). An individual’s risk of having a stroke increases by 1% per year for persons 65 to 74 years of age and African Americans have a 60% greater risk of having a stroke and being disabled than do Caucasian Americans (Stroke Council of the American Heart Association, 1999). Today, in the United States the population is increasing in age and technological advances have increased the life span of these individuals. Adults are living longer with chronic diseases and health problems. RNs must understand a patient’s underlying disease process and its influence on their health literacy.

Often patients experience shame associated with low health literacy in the healthcare setting. Parikh, et al. (1996) examined 202 patients at a large acute care public hospital in Atlanta, Georgia for a relationship between shame and low health literacy. The subjects were administered the TOFHLA and completed a demographic survey. A trained research assistant conducted one-on-one interviews on questions relating to difficulty reading and the shame
associated with it. The study found that two-thirds of the subjects with low literacy skills admitted they had trouble reading. Some subjects admitted that this was the first time they had acknowledged their poor reading skills and shame associated with it (Parikh et al., 1996). Additionally, two-thirds of these subjects had never told their spouse, one-half had never told their children, and 19% had never told anyone including healthcare providers of their reading difficulties. A major barrier to improving health literacy is shame and stigma (Committee on Health Literacy of the Institute of Medicine, 2004). Low health literacy patients experience embarrassment and shame and often do not express their concerns in the highly literate healthcare environment (AMA Foundation, 2003).

A variety of factors in the healthcare system contribute to low health literacy. These include complicated medication regimens, decrease in the time healthcare professionals spend with patients, higher expectations for self-care, and multiple healthcare choices. There are 11,000 types of medications available in the United States today than compared with several hundred available in the 1960’s (Schwartzberg et al., 2005). The average patients take multiple medications each day to manage a variety of chronic diseases and often times these medication regimens require complex instructions requiring the time of day, specific diets, and whether or not to take them with meals. Additionally for some of these medications to be effective, they must monitor blood levels and the patient must have organizational skills for this treatment. This relationship of medication levels and schedules is complex for highly organized educated individuals and almost impossible for individuals with low health literacy (Schwartzberg et al., 2005).

Also today in the healthcare system there is a decrease in the time healthcare professionals spend with patients while at the same time there is an increase in the complexity of
healthcare treatments (Schwartzberg et al., 2005). Especially for elderly patients who often have chronic medical problems requiring multiple medications and treatments, the average time a physician spends with the patient is 22 minutes (Mann et al., 2001). Most of that time is spent performing a physical examination, health history and paperwork. Very little time is available for a patient to ask questions and be educated on their conditions (Roter et al., 1997).

Another factor that is difficult for individuals with limited health literacy is the decrease in hospital stays and the higher expectations for self-care at home. Patients are sent home after only a day or so in the hospital and are expected to manage complex treatments and medications with written instructions and no resources (Schwartzberg et al., 2005). The majority of surgical procedures are performed on an outpatient basis, and most times the patient returns home the same day as the procedure. There are limited follow-up programs and procedures in place to assist the majority of low health literate patients.

This increase in a community-based healthcare system has increased office-based physicians offices (Schwartzberg et al., 2005). In 2001, “patients made 84 million visits to hospital-based outpatient departments and 108 million visits to emergency departments (Hing & Middleton, 2003; McCaig & Burt, 2003). When patients’ become ill they see multiple physicians in their offices, community urgent care center or in the hospital emergency room. Very often these healthcare professionals are not connected and do not share patient information with each other. Therefore, the patient must communicate their medical information to various healthcare professionals. Often, this communication is difficult of patients with limited health literacy (Schwartzberg et al., 2005).

Healthcare clinicians can recognize patients who may have low health literacy levels by the following behaviors: incomplete healthcare forms, non-compliance with healthcare
treatment regimes, missed healthcare appointments, the inability to verbalize basic information related to health status and treatment, frequent excuses such as forgetting one’s eyeglasses, always having headaches when asked to read, regularly bringing family members or friends to help with paperwork, identify pills by looking at them rather than the prescription label, and asking questions on topics already covered in written handouts (Osborne, 2005; Weiss, 2003). Healthcare practitioners can look for these assessment clues and if present further evaluate the patient’s health literacy.

Individuals understand and process healthcare teaching in different ways. Some individuals prefer using visual materials, while others prefer to listen to someone talk to them, still others prefer to absorb information by touching objects or doing (Osborne, 2005). An individual’s age also impacts their ability to process healthcare information. A younger person might prefer information that uses the latest technology while an older person may benefit from healthcare teaching that considers any cognitive, sensory, and physical changes. Adults learners prefer that healthcare teaching consider their questions, concerns, and then focus on practical information which addresses these (Knowles, 1990). Principles of adult learning theory are: adults are motivated through their personal experiences, adults have life-centered learning, adults prior experiences are resources for learning, and adults desire to be self-directed (Knowles, 1990). Most healthcare teaching occurs in the hospital or physician’s office when individuals are sick and have limited time. RNs can create an atmosphere that supports a positive learning experience and remember to teach patients when they are relaxed and ready to learn.
Rural Health Culture

The concepts of cultural health beliefs and health culture are relevant when Registered Nurses provide healthcare to patients in a rural acute care setting. “Cultural health beliefs affect how people think and feel about their health and health problems, when and from whom they seek health care, and how they respond to recommendations for lifestyle change, health care interventions, and treatment adherence” (Committee on Health Literacy, 2004, p. 109). Additionally, the concept of health culture is defined as “all the phenomena associated with the maintenance of well-being and problems of sickness with which people cope in traditional ways within their own social networks” (Weidman, 1975, p. 313). Rural health culture and health literacy influence the content and outcomes of all patient-Registered Nurse interactions.

Cultural health beliefs impacts individuals living in rural areas. Studies suggest that older rural individuals may engage less in health promotion activities as compared with older individuals in urban areas (National Center for Health Statistics, 2002). Overall, individuals living in rural areas tend to be older and have more chronic illness and disabilities (Johnson, 1991; Sanford & Townsend-Rocchiccioli, 2004). Sometimes these individuals utilize home folk remedies for medical treatment (Conley & Burman, 1997). Folk home remedies have been defined as “any health practices used at home before seeking professional health care assistance” (Easom & Quinn, 2006, p. 4). Easom & Quinn, (2006), stated that rural elderly individuals limited access to healthcare and their ability of self-sufficiency may contribute to their use of folk home remedies. Additionally they suggest that health care professionals inquire about rural individuals’ use of folk home remedies and document this on their patient assessment form.

Health culture influences rural individuals with limited English proficiency. These patients have reported a decreased satisfaction with their healthcare experiences, difficulty
communicating with physicians, and a decrease in their participation in healthcare decisions (Baker, Hayes, & Fortier, 1998; Collins et al., 2002). Registered Nurses are often the first healthcare professionals these patients encounter. It is important for RNs to engage these rural patients in participating and making decisions in their own healthcare.

**Participatory Decision-Making of Patients**

Today in our busy healthcare environment, patients and their families are required to assume a greater responsibility for their health and wellness. The first step for the patient is to communicate with the healthcare professional in a dialogue about their health (Schwartzberg et al., 2005). For patients with limited health literacy, the participation in a conversation with healthcare professionals in which they must appropriately describe their health issues in an organized and clear manner is difficult. A medical visit occurs in a context where a physician or nurse will ask questions and the patient reacts by responding to the questions (Schwartzberg et al., 2005). Often times healthcare professionals use focused and closed-ended questions to gather health history information from patients. In this environment the patient may be intimidated and feel uncomfortable asking questions about their health. Schwartzberg, et al. (2005) suggested the physician or healthcare professional use open-ended questions which “allow more room for patients’ discretion in response than closed-ended questions” (p. 91). Additionally they suggest asking the patient about what they know, care about and find relevant to their daily life. Healthcare professionals can utilize relationship-building skills such as empathy, emotional support, reassurance and personal regard (Schwartzberg et al., 2005). This can create a warm and inviting healthcare experience for the patient and can build trust and confidence between the patient and health professional. Also, the use of non-verbal behaviors such as head nods, eye
contact, leaning forward, and sitting at the same level as the patient, encourages the patient to actively participate in the medical visit.

Physicians and nurses can work to develop a relationship with patients which will encourage patients to actively engage in their healthcare. The literature described this relationship between a nurse and patient as a partnership (Courtney, Ballard, Fauver, Gariota, & Holland, 1996; Munro et al., 2000). Important elements in this nurse-patient partnership are the following: each person is valuable; both individuals must share responsibility, risk, accountability, and power (Courtney, 1995; Gillies, 1998; Torjman, 1998). It is essential that respect and trust be present in the nurse-patient relationship (Malloch & Porter-O’Grady, 1999). Usually a nurse-patient partnership develops in the healthcare setting when a patient is seeking treatment for an illness (Courtney et al., 1996). Gallant, Beaulieu and Carnevale (2002) stated that it is important for the nurse and patient to both commit to sharing the power within the partnership relationship. Nurses contribute knowledge, clinical experience, education, and facilitation to the partnership and patients bring their experiences about health and managing health concerns (Thorne & Robinson, 1988). The central ingredient in the nurse-patient partnership is power sharing and negotiation (Gallant et al., 2002). As the nurse-patient partnership develops, the patient engages in participatory decision-making and becomes empowered (Gallant et al., 2002). Another study has shown that patients have a positive experience during medical visits when participatory decision-making is used during medical visits (Roter, 2000b). Additionally, some studies show that patients have more satisfaction with their healthcare experiences, consistent medication use, and overall improved health outcomes when physicians utilize participatory decision-making with patients (Kaplan, Gandek, Greenfield, Rogers, & Ware, 1995; Kaplan, Gandek, Greenfield, Rogers, & Ware, 1996).
Patients report high satisfaction with medical treatments and outcomes when they engage in participatory decision-making in their healthcare decisions (Osborne, 2005; Raeburn and Rootman, 1998). Some patients are technologically aware, seek healthcare information on the internet and expect to actively participate in decisions regarding their health (Osborne, 2005). Registered Nurses have a responsibility to develop a nurse-patient partnership, and through this process the patient will engage in participatory decision-making and become knowledgeable patients who advocate for their healthcare. Registered Nurses can suggest some practical skills that patients can perform to encourage participatory decision-making. These skills are encouraging a patient to keep a written record of how they are feeling, keep their personal healthcare records, and prepare before going to a healthcare appointment (Osborne, 2005). Often times patients become nervous in healthcare settings and have difficulty thinking and asking all of their questions. Through the development of the nurse-patient partnership, RNs can talk to patients ahead of the appointment and encourage them to think of their questions before their scheduled appointment. Additionally, RNs can utilize effective communication techniques such as pausing during conversation, asking if patients have any questions, and encouraging patients to ask questions in the healthcare setting (Osborne, 2005). A patient’s sense of empowerment grows through the development of the nurse-patient partnership. As the patient obtains new knowledge, skills and participatory competence, their feelings of empowerment within the healthcare system increases (Kieffer, 1984).

**Empowerment of Patients**

The concept of critical consciousness was developed by Freire in Pedagogy of the Oppressed (Freire, 1983). He began teaching third-world people how to read and the educational system that followed was: the teacher is the depositor and the students are the depositaries, the
teacher issues orders which students memorize, repeat and passively receive, knowledge is a gift bestowed by the knowledgeable to those that know nothing, teachers and administrators select the curriculum and content, and “the more students work at storing the deposits entrusted to them the less they develop the critical consciousness which would result from their intervention in the work as transformers of that world. The more completely they accept the passive role impressed on them, the more they tend simply to adapt to the worked as it is and to the fragmented view of reality deposited in them” (Freire’s Critical Consciousness, 2007, p. 2).

Freire’s method was originally developed to teach literacy skills to adults. His belief that vulnerable populations were subjected to inequities in economics, political, and social relationships often mirrored and reinforced in traditional educational experience. Friere believed that vulnerable populations were transformed by educational experiences which fostered competence and confidence in these individuals which lead to empowerment (Schwartzberg et al., 2005). This concept is the basis for empowerment which can be defined in terms of health or in terms of an individual. Empowerment for health is defined as “a process through which people gain greater control over decisions and actions affecting their health” (Nutbeam, 1998, p. 354). Additionally, individual empowerment refers primarily to “the ability to make decisions and have control over his or her personal life” (Nutbeam, 1998, p. 354). In the healthcare context, Friere’s method is used to explain the interaction between the patient and physician. This framework was used to explore the dynamics of medical communication with low literate individuals (Roter, 2000a; Roter, Stashefsky-Margalit, & Rudd, 2001). The framework begins with the patient telling their story to the physician and is very similar to Friere’s process of “disclosure and reflection to affirm the value of life experiences for an adult learner” (Schwartzberg et al., 2005, p. 88). The physician positively validates the patients’ social and
cultural experience. The key experience for the patient is affirmation of self-worth and self-knowledge. The next step in this process is activation for critical dialogue through questions and answers, information gathering and joint problem-solving. This step is similar to Friere’s dialogue and critical analysis which encourages an individual to examine their experiences and circumstances that may have contributed to their present state. The key experience for the patient is analysis of the root causes of their problems. Individuals with low health literacy may depend more on the physician to guide them in this reflective process. The final step in this framework is the patient’s empowerment of change “by making informed choices and taking control and responsibility for social, environmental and personal context of one’s health-related status quo” (Schwartzberg et al., 2005, p. 90). This step is similar to Freire’s process of transforming a passive individual to an active participant in life. The key experience of the patient is taking control and responsibility for their health actions. Wallerstein and Bernstein (1988) believed that using Friere’s method in health education programs for low literate individuals can achieve outcomes that are “closely aligned to the definition of critical health literacy (Nutbeam, 2006, p. 264).

Nutbeam (2006) proposed a model of health literacy to structure patient healthcare educational programs. This health literacy model has three levels, which include functional health literacy, interactive health literacy, and critical health literacy. Functional health literacy is the outcome of traditional health education programs that communicate factual information about health risks and how to use the health system. It implies limited health goals directed toward the patient and does not promote interactive communication between the patient and healthcare professional. Interactive health literacy is the outcome for recent health education programs where the focus is on improving the patient’s self-confidence and motivation to act
independently on healthcare knowledge. Finally the highest level is critical health literacy which is the “cognitive and skills development outcomes which are oriented towards supporting effective social and political action as well as individual action” (Nutbeam, 2006, p. 265). At this level, health educational programs focus on individuals and communities acting on “social and economic determinants of health” (Nutbeam, 2006, p. 265). Health educational programs that have the outcome of achieving critical health literacy empower individuals and communities. In order for patients to have improved health outcomes they must achieve critical health literacy which will empower them to make decisions and actively participate in their healthcare with health professionals.

**Qualitative Research Studies on Health Literacy**

Baker et al. (1996) conducted a qualitative study to determine the difficulties that patients with low literacy skills have interacting within the health care system and to identify coping skills they used to handle these problems. Sixty patients with low literacy levels from two hospitals participated in the study. The participants included 47 African Americans, 12 Latino, and one white participant. The REALM screening tool confirmed the low literacy levels of participants. Forty-nine subjects participated in 10 separate focus group sessions and the remaining 11 were individually interviewed (Baker et al., 1996). Six themes emerged, “A dominant theme occurring throughout all of these was the tremendous shame patients with low literacy felt about their reading difficulties” (Baker et al., 1996, p. 330). The feeling of shame contributed to intimidation during interactions with health care providers, “…making them less likely to ask questions or admit they do not understand” (Baker et al., 1996, p. 331). Most patients did not reveal that they had reading difficulties because of embarrassment, and belief that this information would not be of interest to their health care provider (Baker et al., 1996).
Brez and Taylor (1997) conducted a qualitative study to gain an understanding of low literacy English speaking adults to the screening of their reading ability. Two hundred adults enrolled in a community college literacy program in Eastern Ontario were presented information about the study. Eight participants, who self described themselves as having difficulty understanding printed material, were administered the REALM screening tool, and then interviewed. One theme emerged which was that exposure of the participants reading limitations was risky and to be avoided whenever possible (Brez & Taylor, 1997). Additionally, all participants stated “feeling embarrassed and appearing stupid were commonly cited concerns” (Brez & Taylor, 1997, p. 1043). All participants experienced two opposing forces hiding their illiteracy and wanting healthcare information while in the hospital. Participants expressed “an expectation that health care professionals would be knowledgeable and competent, approachable and friendly, understanding and compassionate, and trustworthy and respectful of patient confidentiality” (Brez & Taylor, 1997, p. 1043). The participants agreed “that doctors and nurses should be aware of individual patient’s reading ability and should use this information to improve the effectiveness of information exchange” (Brez & Taylor, 1997, p. 1043). Finally, the participants perceived the screening experience as negatively when they were told it was a test (Brez & Taylor, 1997).

Hartman, McCarthy, Park, Schuster, and Kushi (1994), conducted a focus group research study to evaluate an education program promoting low-fat eating behaviors. Most of the participants were women in the Minneapolis-St. Paul area with limited literacy skills. One goal identified by the participants was that they wanted to receive simple, practical and relevant information about what foods to eat and how to prepare them. Additionally, they considered
lectures as ineffective and preferred hands on food preparation activities that allowed them to share information with each other.

Macario, et al. (1998), conducted a focus group research study to evaluate nutrition-based information with low literate participants from an adult basic education programs in the Boston area. The study revealed that these individuals with low literacy skills first sought healthcare information from family and friends. The study noted that effective nutrition interventions should build on the patient’s social network, be visual, interactive, and culturally appropriate.

Summary

Health literacy is defined as “the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health” (WHO, 1998, p.210). Nutbeam (2006) expanded on this definition stating “health literacy means more that being able to read pamphlets and successfully make appointments. By improving people’s access to health information and their capacity to use it effectively, health literacy is critical to empowerment” (p. 264; Nutbeam, 1998, p. 357). In the past 10 years, there were several governmental and professional organizational reports on the literacy and health literacy levels of adults in the United States. These reports have called for healthcare professionals, healthcare agencies, healthcare policy makers, and healthcare researchers to make health literacy a priority. The Committee on Health Literacy (2004) challenged health service providers and communities to increase their knowledge, awareness, and responsiveness to health literacy. Fetter (1999), concluded patients who do not have the ability to follow basic instructions have great difficulty navigating the healthcare system. A patient’s health status, health knowledge and use of healthcare services are all related to health literacy. Paasche-Orlow, et al. (2005), called for a simplification of health services and education
so that patients with low health literacy can receive adequate healthcare. RNs have an ethical
duty to set aside all prejudgments and adequately assess all patients for health literacy in order to
provide safe and competent care. The literature overwhelmingly supported the investigation of
rural care Registered Nurses interpretation of health literacy and its effect on patient care.
CHAPTER 3

METHODOLOGY

Qualitative Research

Qualitative researchers use several methods to study things and people in their natural environment, and attempt to make sense of, or interpret the phenomena in terms of the meaning human beings bring to them. The research is considered naturalistic or contextual. Qualitative research designs “is adapted, changed, and redesigned as the study proceeds because of the social realities of doing research among and with the living” (Denzin & Lincoln, 1994, p. 218). This allows for “multiple views of framing the problem, selecting research strategies, and extending discourse across several fields of study” (Denzin & Lincoln, 1994, p. 218). It relies on solid descriptive data which allows the reader to understand and follow the meaning of the human experience under study (Denzin & Lincoln, 1994).

I conducted a qualitative study with a phenomenological framework in a rural acute care setting located in Southern Louisiana. The purpose of this research study was to explore rural care Registered Nurses’ interpretation of health literacy and its effect on patient care.

Phenomenological Paradigm

Phenomenology is one method used in qualitative research. The primary goal of a phenomenological research study is to capture the essence of a phenomenon from the perspectives of the individuals who experienced it (Denzin & Lincoln, 1994; Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). Qualitative researchers explore their own experiences and beliefs of the phenomena being studied, and set these aside so that they enter the study with an open mind (Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). The researcher creates an open and honest climate by identifying their
own prejudgments, biases, and by setting them aside before the study begins. Next, the researcher begins a process of phenomenological reduction in which the researcher continues to return to the essence of the experience to understand the complete meaning of the phenomena (Moustakas, 1994). Then the researcher begins the process of horizontalization in which the researcher examines all the collected data equally (Moustakas, 1994). Moustakas (1994) explains that in horizontalization, “there is an interweaving of person, conscious experience, and phenomenon. In the process of explicating the phenomenon, qualities are recognized and described; every perception is granted equal value, nonrepetitive constituents of experience are linked thematically, and a full description is derived.” (p. 96). This means the researcher examines the collected data, and determines meaning units which are grouped into themes. The researcher must describe in detail the steps they followed in examining the collected data and determining how they arrived at the meaning units and themes. The qualitative researcher collects data from participant interviews, field notes, reflective journals, and direct observations. All of these data sources are used in the analysis and identification of themes and meaning units. The data are summarized descriptively using words and participants statements. The researcher determines that saturation is achieved when the analysis reveals repeating themes and meaning units. Once saturation is achieved no additional sample units are required. Munhall (2001) stated that saturation is achieved when all data fit into categories and there are no new or developing themes that emerge from the analysis. Next, the researcher begins the process of imagination variation which involves the examination of the data from many perspectives and various frames of reference (Moustakas, 1994). It is most important for the qualitative researcher to document each step of the data collection and analysis process in order to illustrate how conclusions about the data were reached. The last step in the phenomenological process is to construct textural and
structural descriptions of the phenomenon being studied (Moustakas, 1994). This is referring to the documentation of the essence or meaning of the experience or phenomenon that is being researched.

**Rationale for Phenomenological Lens**

The primary goal of a phenomenological research study was to capture the essence of a phenomenon from the perspectives of the individuals who experienced it (Denzin & Lincoln, 1994; Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). Qualitative researchers explore their own experiences and beliefs of the phenomena being studied, and set these aside so that they enter the study with an open mind (Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). The researcher must describe in detail the steps they followed in examining the collected data, and determining how they arrived at the meaning units and themes. Qualitative research data is summarized using thick, rich, and detailed descriptions of the phenomena in words and participants statements. A phenomenological approach was the best framework in which to explore Registered Nurses interpretation of health literacy and its effect on patient care in a rural acute care setting.

**Credibility**

Qualitative researchers are concerned about the truth and accuracy of their findings. Denzin & Lincoln (1994) stated, “validity in qualitative research has to do with descriptions and explanation, and whether or not a given explanation fits a given description. Is the explanation credible?” (p. 216). From social interactions between the researcher and participant data is constructed and interpreted. Given this qualitative framework, Freeman, deMarrais, Preissle, et al. (2007) state, “There are no ‘pure,’ ‘raw’ data, uncontaminated by human thought and action, and the significance of data depends on how material fits into the architecture of
Therefore the credibility is central to the believability of the research findings. Credibility refers to the accuracy or truthfulness of the research findings. It is important to determine how well the researcher has shown confidence in the findings based on the research design, participants, and context of the study (Ary, Jacobs, & Razavieh, 2002). The researcher is obligated to present the step-by-step process performed in the study in order to accurately represent the participant’s experience. The researcher must describe, explain, or theorize how the research conclusion was derived (Denzin & Lincoln, 1994; Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). The researcher must demonstrate and report appropriate and adequate methods of data generation in order to support any findings from the study (Freeman, et al., 2007).

The qualitative researcher uses strategies to ensure the credibility of the research findings such as triangulation and member checks. Triangulation is a “process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation” (Denzin & Lincoln, 1994, p. 241). Triangulation is when the researcher uses at least two other individuals in addition to herself or himself to independently analyze the data (Denzin & Lincoln, 1994; Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). Triangulation is used to confirm validity of the research findings. I used myself, my major professor and a nurse educator colleague to assist in the triangulation of data. Validity of the study is enhanced when multiple investigators agree on the meaning of the description of content, events and participant statements.

Member checks, which is having the participant read their interview transcript and evaluate its accuracy, is an additional method to enhance the validity of the qualitative research (Denzin & Lincoln, 1994; Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis,
Using verbatim quotations from the participant interviews that illustrate thick, rich descriptions of the phenomena help convey to the reader an understanding of the context the research. Member checks are used by qualitative researchers to ensure the credibility and trustworthiness of the research findings. The member checks were utilized in this study in the analysis of data. Qualitative researchers demonstrate validity by showing they have collected data in a thorough and authentic manner. They also demonstrate validity by being rigorous and descriptive in their analysis steps. It is important for the qualitative researcher to provide detailed explanations for how they arrived at their findings. The relationship of the data to the researcher’s interpretation is demonstrated through offering adequate and appropriate information to the readers so that they may examine and assess the researcher’s assertions and interpretations (Freeman, et al., 2007).

Qualitative researchers use the term “transferability” when referring to generalizability of the research findings. The user of the research determines the appropriate fit between the context of the study and the context to which they wish to transfer the findings (Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). The researcher provides rich, detailed and thick descriptions of the context so that the potential users can make comparisons and judgments about similarity and transferability. The reader of the research decides whether the studies claim applies to their situations (Freeman, et al., 2007).

Participants

I established contact with RNs who practice in a rural Southern Louisiana acute care setting. I chose a purposeful sampling technique and intentionally selected RNs who had experience in the assessment of patients. The criteria are: RNs who have practiced nursing for two or more years in a rural acute care setting; RNs who are at least 21 years old; and RNs who
have cared for patients 21 years or older. The participant interviews were conducted at a mutually agreed upon location in a hospital conference room or in the participant’s office at a convenient time for both the participant and the researcher. A quiet, comfortable and private area was utilized for all of these interviews.

**Protection of Human Subjects**

Approval was obtained from the Internal Review Board of Louisiana State University (LSU) to conduct this research study (#E3406). Informed consent was obtained from each participant before beginning any interview, and each one agreed to have the interviews recorded and the results of this study published. The ethical principles underlying informed consent are that “participants are as fully informed as possible about the study’s purpose and audience; they understand what their agreement to participate entails; they give that consent willingly; they understand that they may withdraw from the study at any time without prejudice” (Rossman & Rallis, 2003, p. 75). I was careful to ensure the privacy and confidentiality of each participant during the research study.

**Data Collection**

A qualitative researcher’s central goal is to gain a deeper and comprehensive understanding of a specific group of people or phenomenon. Data were collected from recorded participant interviews and researcher field notes. To begin the data collection process, I set aside my prejudgments and opened the research interview with an unbiased and receptive presence which created an open and accepting atmosphere for the participants. I did not take notes during the interview process and my full attention was on the participant. I established rapport with each participant by smiling, using positive non-verbal behavior, and laughing when the participants did. The participant directed the location and time for their interview, and a private, quiet,
comfortable location was utilized. The researcher followed the study’s guiding questions during the participant interviews and thick, rich and detailed descriptions of the experience of RNs awareness and assessment of a patient’s health literacy were studied. The participant interviews were recorded on two tape recorders and the voice recordings transcribed into transcripts. I listened several times to the voice recordings and cross checked the accuracy of the verbatim transcripts.

**Management of the Data**

The privacy and confidentiality of each participant was ensured during the taped recorded interviews and throughout the research process. Each participant selected a fictitious name which was used in the published results this study. I personally transcribed each participant’s interview and listened and reviewed each transcript for accuracy. I used a paper and pen to record in a research journal my impressions and reflections immediately after the participant interviews. The tape-recorded interviews are stored in a locked file cabinet in my office and my major professor and I are the only persons who have access to the locked cabinet I will keep the participant’s tape recorded interviews until May 2010 and then destroy them.

**Data Analysis**

The phenomenological data analysis model proposed by Moustakas (1994) was used to analyze the collected data titled, “Modification of the Van Kaam Method of Analysis of Phenomenological data” (p. 120). The following analysis steps are:

1. I read every participant transcript several times and remained open to every statement. Ever participant statement had equal value and weight. Moustakas (1994) referred to this process as horizontalization of the data (p. 121).
2. I identified any participant statements that stood out and revealed the phenomenon under study, and highlighted these statements or phrases. Moustakas (1994) referred to this process as invariant horizons or meaning units (p. 121).

3. I reviewed the highlighted phrases and statements and identify similarities. I will then clustered these into themes and give each a brief description and label.

4. Next, I constructed a description of what each participant experienced and how they each experienced it, which Moustakas (1994) referred to as textural-structural description (p. 121).

5. Finally, I developed a composite textural-structural description which was reflective of all of the participant’s experiences (Moustakas, 1994). This description was the synthesis of meanings and essences of RNs’ interpretation of health literacy and its effect on patient care in a rural acute care setting. By using Moustakas (1994), “Modification of the Van Kaam Method of Analysis of Phenomenological Data,” I gained insight into these RN’s experiences (p. 120).

Instrumentation

Guiding Questions

I developed guiding questions from a comprehensive review of the literature on health literacy. These guiding questions were the framework for the research study and directed the participant interviews. I began each interview with general questions, which provided an opportunity for the participant and researcher to become acquainted. These introductory questions included: “Can you tell me about yourself as a practicing registered nurse?”; “How long have you practiced nursing?”; “Where did you go to nursing school?”; “Tell me about where you have worked as a registered nurse.”; “Tell me about the unit or units you practice
nursing in this hospital?”; and “Can you give me an example of the typical client you care for on that unit?”. After these introductory questions, I asked each participant these guiding questions:

1. Think back and describe to me a time where you learned about health literacy.
2. What does health literacy mean to you?
3. Think back and tell me about a patient that you suspected had a problem of understanding healthcare teaching or information.
4. Describe for me a patient where you assessed their health literacy.
5. In your work place, describe to me a time when you were asked to assess a patient’s health literacy.
6. Recently in your hospital, what have you seen in the assessment of the health literacy of a patient?
7. Tell me about a time where you shared information you had learned with another nurse about your understanding of health literacy.
8. On a typical work day, how do you assess the health literacy of patient’s you see?

The Role of the Researcher

Qualitative researchers are considered the instrument through which all data is collected. These researchers collect data by face-to-face interviews with participants in their natural and contextual environment (Denzin & Lincoln, 1994; Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). Guiding questions are used to structure these interviews with participants (Merriman & Associates, 2002; Rossman & Rallis, 2003). The interview in a phenomenological research study serves the purpose of exploring meaning from the participant’s experiences with the phenomena (Van Manes, 1990). Qualitative researchers also collect data by reviewing archival records, recording audio and video tapes, and observing participants in their
natural environment (Denzin & Lincoln, 1994; Merriman & Associates, 2002; Moustakas, 1994; Rossman & Rallis, 2003). I used participant interviews which were taped-recorded and transcribed verbatim. My initial thoughts and impressions of each participant and interview environment were recorded by pen and paper immediately following the interviews.

**Personal Biography**

The researcher is the instrument for collecting the data in a qualitative research study. It is important for the researcher to set aside any predetermined judgments, values, beliefs and bias before conducting interviews with participants (Denzin & Lincoln, 1994; Merriam & Associates, 2002; Moustakas, 1994). Therefore it is necessary to understand the lens from which the researcher views this process. I have been a practicing registered nurse (RN) since 1982, and have a bachelor of science in nursing (BSN) from the University of Texas in Austin, and a master of science in nursing (MSN) from Southeastern Louisiana University. A large part of my practice experience is in the area of surgical services in Texas and Louisiana. I have had the opportunity to care for culturally and economically diverse patients in the operating room, recovery room, endoscopy room, preoperative area, surgical floor, 24-hour unit, and the wound center. Currently I am practicing as a nurse educator at the foundation level in a baccalaureate nursing program at Southeastern Louisiana University in Hammond, Louisiana. I have always enjoyed the caring, knowledge seeking, flexibility, challenge of the nursing profession. I most enjoy caring for patients and learning new things that help me provide the best care possible for my patients. Every patient is unique, and this provides an opportunity to care for their specific health care needs. I least prefer the lack of resources in performing my job and the poor financial compensation. As a registered nurse, I am continually challenged by the health care system to perform at my highest level with very few resources. I have encountered patients who have
limited education, poor socioeconomic status, limited access to health care, multiple health problems, and limited health literacy. I understand the meaning of health literacy to be, “the ability to read, understand, and use health information to make appropriate healthcare decisions and follow instructions for treatment” (Weiss, 2003, p. 6). Over my nursing years, I remember encountering several patients who I believe had limited health literacy. I remember one patient from the preoperative area. The hospital where I was working required all patients who were having surgery to attend a preoperative education meeting. I was working in this area and suspected that this patient had a problem reading and understanding the surgical instructions. I became concerned when the client stated “I have lost my glasses.” “Can you help me with this?” I responded yes and asked if they had someone with them, and if so, would they like that person to hear the surgery information? The patient responded yes that they wanted their sister to hear the surgery information. I began reading the forms to the patient and family member. I used a pamphlet with a lot of pictures and few words to describe the procedure. I frequently asked the client to explain in their own words what they understood me to say. I listened for any inconsistencies, clarified information in a caring manner, and provided positive comments. I wrote down my telephone number on the form and encouraged the patient to call if they had any questions after leaving the hospital. I tried to respect fully provide nursing care to this patient. I believe this patient had limited health literacy skills but was embarrassed and did not want me to know. I am not sure if the patient really understood all that I said or if I had a positive impact on improving their health care.

**Ethical Dilemmas**

I am a registered nurse who practices in Southern Louisiana. I also teach at the Southeastern Louisiana University School of Nursing and may personally know some of the
nurse participants and patients they care for. During the interviews, I was cognizant of my role as
a researcher and did not allow any personal bias or knowledge interfere with the data collection
and analyses process.

I gained permission from administration to post a flyer in the rural acute care setting
asking for RNs to participate in this study. I spoke with RNs who read the announcement and
expressed an interest in being interviewed. At no time did I coerce the RNs to participate in this
study. The RNs volunteered to participate in this study and signed consent forms to do so.

Confidentiality of the participants is another ethical issue encountered in this study. I
assured each RN participant that their identity would be protected and that only I would be able
to connect their names to the transcripts. I used fictitious names in this study that were selected
by each RN participant. At no time did I disclose the identity of the participants.
CHAPTER 4

ORGANIZING, ANALYZING, AND SYNTHESIZING DATA

This chapter explains how I organized, analyzed and synthesized the collected data utilizing Moustakas’s “Modification of the Van Kaam Method of Analysis of Phenomenological data” (Moustakas, 1994, p. 120). I initially read every participant transcript several times and considered all statements equal in value and weight. This process is referred to as horizonalization of the data. Next, I identified the participant statements that stood out and revealed the phenomenon which is the invariant horizons or meaning units. I reviewed the meaning units and identified similarities which I clustered into themes. Then I constructed a description of what each participant experienced and how they experienced it which is referred to as the textural-structural description. I constructed a cognitive map of each participant’s meanings and experiences of the phenomenon. Finally I developed a composite textural-structural description which reflected all of the participants’ experiences. This description is the synthesis of meanings and essences of the phenomenon of this study. The phenomenological research design for this study was to explore rural care RNs interpretation of health literacy and its effect on patient care.

Horizonalization

The process of horizonalization began by reading the verbatim transcripts several times and reflecting on the meaning of each participant’s experiences. I remained open, objective and set aside my personal prejudgments as I read every transcript. All participant statements were considered equal in weight and value. Each participant was given the opportunity to make corrections or additions to their transcript during the process. The data was considered valid and represents the essence of the participant’s experiences because no participant chose to modify or
change their transcript. The researcher, major professor and practice members acted together in the triangulation and analysis of the participants statements. I was able to understand and analyze the data by reading and re-reading the transcripts and reflecting on the participants’ meaning.

Table 1 refers to the participant RNs educational background, total practice years, employment years at the current rural care acute setting, and practice years as a licensed practical nurse (LPN). Three of the participants had practiced as a LPN before becoming a RN. Four participants held an Associate Degree in Nursing. Four of the participants complete practice experience as a RN occurred at the current rural care acute setting.

Table 1: Rural care Registered Nurses description of background, RN years of practice, employment and LPN years of practice in nursing.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Educational Background in Nursing</th>
<th>RN Practice Years</th>
<th>Employment Years at this Rural Acute Care Setting</th>
<th>LPN Practice Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jane Doe</td>
<td>Baccalaureate</td>
<td>11.0</td>
<td>11.0</td>
<td>0</td>
</tr>
<tr>
<td>Peggy Sue</td>
<td>Associate</td>
<td>12.0</td>
<td>12.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Delta Girl</td>
<td>Baccalaureate</td>
<td>18.0</td>
<td>18.0</td>
<td>0</td>
</tr>
<tr>
<td>Ga Ga</td>
<td>Associate</td>
<td>33.5</td>
<td>26.0</td>
<td>0</td>
</tr>
<tr>
<td>Flo</td>
<td>Masters</td>
<td>29.0</td>
<td>10.0</td>
<td>0</td>
</tr>
<tr>
<td>Sarge</td>
<td>Associate</td>
<td>5.0</td>
<td>5.0</td>
<td>9.0</td>
</tr>
<tr>
<td>Dee</td>
<td>Associate</td>
<td>17.0</td>
<td>0.5</td>
<td>4.0</td>
</tr>
<tr>
<td>Barbara</td>
<td>Diploma</td>
<td>25.0</td>
<td>10.0</td>
<td>0</td>
</tr>
</tbody>
</table>
**Meaning Units**

After reading and reflecting on the verbatim transcripts I identified the participant statements that most stood out and identified these as meaning units. Moustakas (1994) referred to the meaning units as those statements that stand out and reveal the phenomenon under study. After reflection, I organized the meaning units from each participant’s transcript. Next, I clustered the meaning units according to each guiding question. I deleted all distracting phrases from the meaning units so that the descriptive essence was captured and was careful not to take any participant statement out of context. The following are the verbatim participant responses that I identified as the most significant meaning units.

The meaning units that I identified as most relevant to the guiding question, “Think back and describe to me a time where you learned about health literacy” included the following statements:

**Jane Doe:** Remember learning about it in nursing school and educational courses……..continuing educational courses; Do not remember hearing it called health literacy; Remember hearing it called patient education.

**Peggy Sue:** I would have to say that goes back to nursing school; It was mostly our clinical instructor…………..I remember one clinical instructor who always ask what did you teach the patient today?; I am trying to think of if there was any formal teaching or if it was just an instructor thing……..I don’t know; Don’t remember it called health literacy.

**Delta Girl:** When I was in nursing school…………………………we talked about it I guess more like holistic nursing where you want to focus on the total picture of what is goin on with that patient not just the physical but you know how’s that patient able to gather that information and what they do with it once they receive it, but not as health literacy, no.; In nursing school we
talked about the difference types of patients and how they can apply what teaching you have
given them but now your focus and goal is really towards teaching the patient, gettin them ready
for discharge from the point that they come in to the time that they leave and back then it was
done but not emphasized as much as it is now and you got to make sure that you document and
show what you have given your patients. Back then it was just okay to go in the room and talk to
the patient but now you give them the papers to go home with; The focus today is did you teach,
teach, teach, teach, did you notify all these different persons, you know patient teaching and
patient education and discharge planning.

**Ga Ga:** I don’t know if I remember the term, health literacy, except in the last few years as a
Utilization Review nurse and I did learn about teaching patients in nursing school; I don’t know
that I ever gave it that title but I heard about patient teaching in nursing school; I have heard the
term health literacy as a paperwork nurse but not prior to that; I had a wonderful, wonderful
nursing instructor and she was such a patient advocate before it had the title of patient advocate,
and she told me to teach the patients about their diseases and medicines because if they know
they can manage it better, so that wasn’t something, that was singled out in my nursing class or
separated in it…………we learned about teaching in everything we did with patients.

**Flo:** Probably in home health…………I would say when there was a push towards self care,
preventive health and decreasing return hospitalizations; I would say for me probably in the late
80’s, early 90’s, when there was a real push in and more focus on wellness as apposed to illness;
There was a shift from keeping people in the hospital for such a long period of time and then
discharging them home to home care and then to the home care nurse who focus is prevention
and teaching and hopefully the patient would not have a return visit to the hospital.
Sarge: In RN school; Just mostly how do you teach, and what to teach well and what level to teach; Mostly try to teach them on a level that they are capable of learning it and not to exceed that level, don’t overwhelm them all at one time with a bunch of information; Try and go back a couple of days in a row and reinforce what you taught them the day before and then add something.

Dee: Well, it was in nursing school, I would guess, that would be in RN school with patients; I remember we did a information literacy class, you know, we focused more on patients, teaching materials for patients, and things like that; Never heard of health literacy.

Barbara: I have never heard of health literacy; The first thing that comes to mind is when we did our public nursing course in nursing school and we had to go to day cares and to nursing homes and to home health settings and that was 27 years ago and everything has changed since then, but everything is the same; I guess we learned about that way back in nursing school when they told us that different people have different levels of understanding and different levels of education and even different socioeconomic groups and things and have different understandings of their health information and you have to kind of gear teaching to whoever you are talking to; If you are talking to a more educated person then you use different terms than if you are talking to someone who has a third grade education………you would have to make it simpler.

The meaning units that I identified as most relevant to the guiding question, “What does health literacy mean to you?” included the following statements:

Jane Doe: About the patient being educated about their healthcare, their disease, medications and everything to do with their healthcare......................Do they understand all of this?...............What all is involved in it?; It means patient education...........what they plan to do to keep themselves as healthy as they can; I point them in the right direction and can help them
like that; What is going on with them while they are in the hospital and what we are trying to do to help them get well.

**Peggy Sue:** It means, I would say, it is the ability to know what is going on, what are we doing to treat them, what are their options, what are we doing for them; It is the patient having the knowledge to take care of themselves, to know what to do, what they shouldn’t do, to have the knowledge to have informed consent and make the proper choices according to what they know.

**Delta Girl:** Patient or either health literacy to me is just more or less how that patient can mentally apply the information that we have given to them and how they will be able to take that information and use it and actually understand what you are saying you know……………..some of them may just understand by you just tellin to em but some of them you just have to be able to be inventive with them and maybe do a little show and tell and have them to demonstrate or what have you but to me it’s all the above for everything; Health literacy means to me, that I really need to a focus on that patient teaching, how well they can consume that information that I’m givin them, and how well they can participate in their care and be able to apply so that we won’t get the repeatin hospital visits and either makin sure the patient or the family who are involved in that patient’s care understand what is goin on with that patient.

**Ga Ga:** That patients are informed and understand and know that they can ask questions, and sometimes they know more about their disease process than we do, they have access to the internet, they can answer their own questions, they need us for clarification and reinforcement and sometimes they know more about their care than we do caretaking-wise and that’s okay; Health literacy is a newer term, for everybody knowing everything that they are suppose to know about healthcare.
Flo: Health literacy is being cognizant, the individual is cognizant of what it takes to maintain a state of well being and being and literacy is being well informed. I mean a lot of the patients that I have come in contact with have had eighth grade education but they were teachable and you found out how they learned the easiest and they could be taught how to manage their diabetes, you could use color-coded stuff if they couldn’t read and write, and you know being well informed and caring for yourself; I think it is being well informed of what ever is going on with yourself as an individual and health in general; Everyone should have a definition of health and a set of guidelines that they want to live by. Some patients choose to ignore healthcare teaching and some don’t.

Sarge: Patient’s bein able to know basically, not major, just basically, what’s wrong with them, how to take care of themselves, and when to call a doctor.

Dee: Well, personally for me to be health literate is to be able to control, you know everything, in access to your health, especially if you do have an illness, and you go to a doctor to be able to understand, you know your treatment, the medicine you’re on, what the benefits of a healthier diet is, your lifestyle changes, and you would be aware of or whatever you can do to make yourself better; Personally, health literacy means to me being aware of your own health and you own care especially if you have an illness and you are goin to a doctor that you understand the treatments you are receiving, the medicines that you are on, and that you have options of different treatments and you know, the patient’s understanding of everything.

Barbara: Patient teaching is what I am more familiar with; It is important to teach your patient and let them know what you are doing so that is what it means you have to keep them informed and in a way that they can understand; You can’t go using all of those medical terms
you know, you have to explain teaching in their terms; The patient has the right to understand everything we are doing to them here and how they need to take care of themselves at home and what they need to do if something isn’t workin right at home even if it’s call your doctor or call your daughter to call the doctor or call us or just call 911 and come here and get checked out; Patient teaching is the most important thing and it is to let patients know what they may be able to expect.

The meaning units that I identified as most relevant to the guiding questions “Think back and tell me about a patient that you suspected had a problem of understanding healthcare teaching or information.”

(A.) “What did you do?” included the following statements:

Jane Doe (A): Well this is hard to think of one person; One patient had been in the emergency room a few days before with high blood pressure and they had been changing her medications………………she went back to her doctor for a follow-up on Monday, and he admitted her into the hospital because her blood pressure continued to be high………………she didn’t tell anyone she was hard of hearing in the emergency room and didn’t hear the nurse say to double her lasix when she was discharged so she didn’t do that………………she did have a written copy of her discharge instructions but she didn’t look at it again until that Monday and she said that she had read that and then started doing it then but she didn’t know that she was suppose to double the lasix until later…………she was delayed in her dosage; I made sure that I was looking at her and she was seeing me, speaking clearly and asking questions, do you understand and do you have any questions?

(B.): “How did you know the patient understood what you told them?” included the following statements:
Jane Doe (B.): I just tried to make sure that I was looking at her and she was seeing me, speaking clearly and asking questions, do you understand and do you have any questions? She said she understood and answered my questions and seemed to understand because I made a point to try to speak clearly and loudly and ask if she had questions and understood the information.

(C.): “What would you have done differently in assessing a patient’s health literacy?” included the following statements:

Jane Doe (C.): Well, I wasn’t there when she was discharged from the hospital that time. So I couldn’t do anything different with that; Always speak clearly to a patient and ask do you understand and do you have questions.

(A.) “What did you do?” included the following statements:

Peggy Sue (A.): We got so many; We had one……….he was new diabetic and he had a hard time understanding it was not just his sugar, it was his carbohydrates and the whole diet and it was very difficult to give him information and to get him to understand and now he understood he had to give himself his insulin but to draw it up……….now that was a lot of teaching; I involved a lot of family members and got home health to also follow up and go down there to his home to follow up.

(B.): “How did you know the patient understood what you told them?” included the following statements:

Peggy Sue (B.): Return demonstrations and just talking with our conversations, you know, you throw in a little question here and there and they appropriately answered it;

(C.): “What would you have done differently in assessing a patient’s health literacy?” included the following statements:
Peggy Sue (C.): We have implemented a patient teaching program that looks at all the different medicines and diseases and what is expected and not expected and what patients need to do when they get home; We have different disease specific forms for patients that gives a description of what exactly is congestive heart failure and like it is a build up of fluid and the symptoms of it like weight gain, shortness of breath and the treatment that you’re going to be getting when you’re here and like intravenous fluids, watching your output and intake and your intravenous fluids rate and what to do when you’re home, continue with your fluid restrictions and we also have a paper on fluid restrictions like how to measure your fluid when you get home, this and that.

(A.) “What did you do?” included the following statements:

Delta Girl (A.): I’m thinking……………………………………I would say it would be with a patient coming in with congestive heart failure and you talk to them about their salt intake and we tell them you know you can’t have all these potato chips and the pickles and whatever and some patient’s don’t understand why you’re saying it; When patient’s think of the can goods, they think because its packed in a can that it’s safe for them to eat or it’s okay, you know, you start tellin em there is a lot of salt in these processed foods and can foods and its like they say no I didn’t know; You tell em about some of the vegetables bein high and the patient’s don’t know and you have to just show em on the back of the can exactly how much salt there is there and even in cold drinks and you know they think cause it tastes sweet there is no salt in there and they just have a problem with it; We bein nurses, we know those things and we kinda expect our patients to know it but sometimes I have to say alright, alright let me get to their level and think as a patient who you know does not have the knowledge I have; Just the other day we had a patient that came in with a high blood pressure problem and his blood pressure was up and I ask
him had he been takin his medicine and he say oh yes mam I take my medicine and even when feel like I have a headache I drink about a cup of pickle juice………..you know the vinegar helps the pressure…………I say why are you doin it and he say well it’s a good home remedy to help bring the pressure down..........so I say yea, but do you know how much salt is in pickle juice, the vinegar and stuff you know the way it’s processed and he say well no I didn’t think of it as bein salty…………he said well you mean I can’t have it…………I said well I don’t think it is a very good idea for you to be drinkin that pickle juice especially on everyday basis I mean that’s way too much salt and he say I gonna talk to my doctor and I say yea you need to talk to your doctor; That made me think that that patient need some teachin and there might be a lot of other things that he is doin that he don’t know is wrong……………..I find that odd.

(B.): “How did you know the patient understood what you told them?” included the following statements:

Delta Girl (B): Because when he was sayin I didn’t know that had salt in it and when I told him well yes pickles, potato chips and those kinds of things are loaded with salt…………he say okay, well I gonna discuss this with my doctor and you know I don’t even know who his doctor is. A lot of patients use that home remedy thing not thinkin of the other things........they hear from friends and family, oh okay this is suppose to bring down the blood pressure but they don’t think about what’s in it..............what am I actually drinkin or what ever.

(C.): “What would you have done differently in assessing a patient’s health literacy?” included the following statements:

Delta Girl (C.): I guess just kinda thinkin back, I would really try to get more resources for them or try to maybe put them in contact with the person they need to get in touch with or tell them questions they could axed their doctor which I do that sometimes, you know, but I don’t
want to be oversteppin; You have to be a patient advocate but at the same time you don’t want to

go over the doctor more or less..........so maybe I could tell them questions that em they could
axed when they go for their next visit and just reinforce some of the things that they are doin, I
guess.

(A.) “What did you do?” included the following statements:

Ga Ga (A.): There were so many who didn’t understand when I worked at the rural
clinic........I remember an elderly black man, who you could tell had worked hard all of his life
and he and his wife would come to the clinic; He had asthma, CHF and was hypertensive and
was a little overweight, but I don’t remember if he was a diabetic or not.........a very nice older
couple probably in their 50’s, and we gave them an aminophylline suppository and gave him
instructions on how to use it, written instructions, but did not tell him that it had to be inserted
rectally...............did not tell him and when he came back he said it really didn’t help and it
was really uncomfortable because it was so hard for him to swallow; We didn’t tell him it was by
rectal and not by mouth and he had no idea of that, at the time, I had no idea that people would
not understand how to take their medicines and this was one of them; You know, that was my
lesson...............don’t assume that patients understand what we tell them.

(B.): “How did you know the patient understood what you told them?” included the following
statements:

Ga Ga (B.): They just said that they understood the information I gave them.

(C.): “What would you have done differently in assessing a patient’s health literacy?” included
the following statements:

Ga Ga (C.): I would have taken the time for him to tell me............I would give him the
medicine and just explain, and this might be very embarrassing for him and me at the time
because then I was still a kid myself………..but now I would just matter of factly tell him, you insert this in your rectum, and the other thing I would say is how you store this medication because we didn’t tell him how to store it; Back then I don’t remember doing any type of teaching at that time but today patients get print-outs about their medicines at Walmart; Back then a great many of people that we took care of didn’t know about anything; Another thing back then is we had the medicine things that contain the days so we would do it for them and wrap up the pills and say you take six pills on Monday and so much on Tuesday; It never occurred to me that he would swallow that suppository………that was just terrible.

(A.) “What did you do?” included the following statements:

Flo: We taught a family how to manage a trach in the home and they were totally illiterate and so that was teaching them how to do trach care and suction and that just was a lot of reinforcement; I just went over and over and over again; I had a mannequin and over and over again and I got them to show me; Constant repetitiveness and I had more than one person in there and the same thing with teaching them how to give insulin; When I have had situations like that I gotten as many family members as I can get together for group learning so they critique each other while they are watching and eventually they practice so much they can do it by themselves; A lot of times I try to start out with a group that is going to be in the home, like the wife, the patient, the son, the daughter, all together and if enough people hear it you know they can a lot of times figure it out when they are at home.

(B.): “How did you know the patient understood what you told them?” included the following statements:

Flo (B.): Body language and I would ask them questions……….I would test them; I would get them to return demonstrate; I would ask them to tell me what I just explained to you and then
you figure out which way they learned best? I would ask them how they learned best, just point blank, and if they really couldn’t tell me then I just had to use observations and if I put a piece of paper in front someone and I told them I was going to write the down the instructions about what they needed to do for their care and if they said to me well just tell me then that was my queue that they had a difficult time with the written word and I would have to come up with an alternative plan as far as color-coding things, putting things in order; medications, you know, for your daytime medicines we’re going to put a yellow marker on the tops of those bottles then on the nighttime medicines, we’re going to put a blue marker on those or sometimes I would put them in pill containers for them but I’m not going to be in there forever so they need to understand which ones are in the day and which ones are in the night; As far as teaching, like a diabetic for instance, teaching numbers and you know you can take someone, okay, they need 30 units of insulin, so you are having to teach them how to draw up the insulin and they can understand the 3 and 0 so that is fairly simple and we use a lot of pictures to show patients; I made sure I had pictures accessible to me so that if they didn’t understand the steps of drawing up the insulin a picture book would suffice and so they could just follow the pictures and they would just turn the page and do that picture.

(C.): “What would you have done differently in assessing a patient’s health literacy?” included the following statements:

Flo (C.): I don’t think so…………….you know, my background in education helps a great deal.

(A.) “What did you do?” included the following statements:

Sarge: A lot of them; Alright, that would probably be………………………………….let’s see, we had an elderly gentleman, he was not the patient but the caregiver, with a wife who was coming from a nursing home on a vent, with a peg tube, and he wanted to take her home with
him; The unrealization of what it was going to be like to take her home, we had to teach him………actually bringing him to the hospital and teachin him how to feed, how to do suctionin, I mean care, do 100% care and by the time he left here, he could do it; We did it for two weeks and eventually had to type up instructions, simplified instructions like open the peg tube up to here, pour the water in here, clamp it off here, but he was able to take care his wife for three weeks before she died.

(B.): “How did you know the patient understood what you told them?” included the following statements:

Sarge (B.): Because he was demonstrating it; He actually had to do care before he left here; We started off just teachin him, showin him, and then we eventually put it all in his boat and he had to stay here and perform the care 24/7 for his wife before we let her go home.

(C.): “What would you have done differently in assessing a patient’s health literacy?” included the following statements:

Sarge: Not a thing; We went in and found out exactly what he could do, what his expectations were, and just how much he really did know, and then we took it to his level and then just taught him that.

(A.) “What did you do?” included the following statements:

Dee: Okay, a couple of weeks ago, we had a patient that was illiterate and the teaching stuff we did was reading it to him so that was one who had trouble understanding; The patient said she could learn by listening so we read stuff to her and she said she understood; I know we have videotapes for us but I don’t know if we have a patient videotape; I know we have papers on diets and stuff and we do have a picture for the pyramid and things like that but the other stuff we just have to do.
“How did you know the patient understood what you told them?” included the following statements:

**Dee (B.)**:
Well she stated that she could understand and she stated that she could understand.

**C.**:
“What would you have done differently in assessing a patient’s health literacy?” included the following statements:

**Dee (C.)**:
Things I could have done better, I mean, if I had more picture items instead of like, words, you know, things with pictures or actually patients audiotapes or videotapes, so that the patient could view it for herself.

**A.**
“What did you do?” included the following statements:

**Barbara (A.)**:
One patient in his 40’s............he is a little mentally delayed and he comes into the emergency room and all the time with his medicines and he just doesn’t understand them and we put names on the tops of his bottles and we put like A for morning and a P for night and that didn’t work and so we put a S for sleep and a W for wake and poor baby he just doesn’t understand; He gets them all mixed up and he doesn’t know which one is for what and you know, we try to make it easier for him and even put numbers on them and say take the number 1 that you have if you have a back pain or whatever but he just doesn’t remember and it is frustrating because the poor baby comes in here all the time; He says now that nurse told me this and I can’t remember which one she said to take; I just found it frustrating because I don’t know how some of these folks around here live on their own and get by.

**B.**:
“How did you know the patient understood what you told them?” included the following statements:

**Barbara (B.)**:
Well, when we were doing the teaching, and we showed him and put it into separate little baggies for him, and I wrote different names because he had different medical
problems like he had back pain and then he has high blood pressure so I wrote back on one bag and blood pressure on the other and he says yes mam, I understand thank you very much and I can remember that but when he gets home I have not idea how to tell except it must not work too well because he continues to come back to the hospital very often.

(C.): “What would you have done differently in assessing a patient’s health literacy?” included the following statements:

**Barbara (C.):** I don’t think anything because like I said we tried to do everything and I don’t know what the rest of them do with him, but I tried to make it as simple as I can and I have asked his sister to go and set up his medicines so I don’t know what else I could have done.

The meaning units that I identified as most relevant to the guiding question, “Tell me about a patient where you assessed their health literacy?” included the following statements:

**Jane Doe:** We do that on all of our patients when they are admitted we have a question on the initial assessment about education and how do they prefer materials, verbal or written, and we have patients at different levels but we go over it with them and then we give them a written copy and we do this with all of our patients.

**Peggy Sue:** You do that on every admission and it is part of the admission form and while you are being admitted…..how high in school did you go………. that sort of thing.

**Delta Girl:** Basically, now, when we assess patients it is on our admission assessment form and we assess all patients…………..I won’t say so much health literacy but literacy in general; We go in to assess these patients on a daily basis while they are here and we plan on keeping in mind whatever you need to do, whenever you have to teach a skill or what have you, but that is a difficult question, I’m tryin to think back.
**Ga Ga:** I don’t know if I would use that term; A lot of our patients are Cajuns and they are dying off but when I first came here they’re primary language communication was French; My husband is French and especially when I worked he had to come sometimes to translate, but that’s hard when they speak a different language, it is hard to communicate, care and make them understand and what we want; A lot of the communication I used was just a soft voice, a soft touch, lots of caring and not just the verbal, it’s the way you act, it’s the way you are when you’re with them but the literacy part many of our patient’s now can not read many more of them back then couldn’t read, we just did the same thing; We plan to get some televisions for education for patients and you know it doesn’t matter if you can’t read a word you can still watch television and a video; Back then we did a lot of verbal teaching and a lot of talking instead of handouts and now in the hospital they have instructions on diagnosis and medicines and all but we did not have those back then.

**Flo:** Okay, well here at the hospital, it is part of the admission assessment and health literacy is part of this; We ask them how they learn best and about their level of education and then we identify, you know, we ask if they, at least I do, what they know about their disease process, what they know about their medications, and so that is my way of assessing how literate they are as far as their self care is concerned.

**Sarge:** Basic health literacy, almost always, as they come in and out, when they are first admitted we go in we do a patient teachin and we give a little handout, about their diagnosis and what they’re here for; First I go in and ask them, what do, you know about it, okay and then they tell me, and then I go a little bit further into depth if they are willing to listen or if they are willing to learn on almost everyone and that’s part of the department’s job.
**Dee:** Well, we do that on every admit, on the admit form itself actually has a place to where you ask the patient how do you learn best and it’s either audio, visual, or reading or a combination those things and you assess that on every admit and they tell you I do better or you know if I read it myself or I do better if I see it on a video or both; If it’s a patient who’s unresponsive I mean it would be the family that would feed them so we would teach the family anyway but I have never had anybody tell me that they didn’t know how they learn best; I usually have to tell them to pick just one of them, cause they want them all and then they pick one of them; That would be when we give them the information, you know, after we do the admit we actually physically pull the literacy sheets, patient teaching sheets and the handouts on the medicines their own, things like that and the social worker can talk a lot with them but on the weekends when they are not here we have to talk a lot with patients and do it all and make copies for them and put then in the room and if the patients say, you know, they have questions then I say I’ll be in and out of the room for them to ask questions after they read it.

**Barbara:** Well, that would be any patient that comes in and you have to figure out how you are going to explain things to them and when we are admitting them or triaging them in the emergency room as you talk to patients you can get a feeling of whether they are going to understand you or not and if they seem like they can understand me then I will explain things normally; It’s hard to think of anything without somebody in front of me that has a hard core example of something for me to teach but if they seem a little mentally slower then I will repeat it more often or I’ll say did you understand that or do you have any questions and sometimes you can just tell by lookin at patients and seein that they get it.
The meaning units that I identified as most relevant to the guiding question, “In your work place, describe to me a time when you were asked to assess a patient’s health literacy.” included the following statements:

**Jane Doe:** Not that I can remember; Not specifically just that; It just seems like we always do that; We always do that; Every time I interact with a patient if I feel like they are not understanding you know like the telemetry and congestive heart failure patients or a lot of patients that come in regularly and we will go over everything and ask have you been eating a lot of salt lately and are you taking your fluid medicine regularly have you been weighing yourself everyday; Sometimes they know those things and maybe they just have not done them or they don’t remember someone telling them to do it but you can kinda tell; You have to find out what was the problem that made them have an exacerbation and maybe teach them about that so they won’t have to keep coming into the hospital; I feel like I always kinda do that about their diseases and what the problem is and what they need to do to keep themselves healthy or as healthy as they can be.

**Peggy Sue:** Other than admission, no I’ve never; Unless I’m taken care of them and then I try to talk to them and I just through conversation kinda of understand “I don’t think he is grasping everything.”

**Delta Girl:** Lately, every time they come in here, I mean, all the time it is on-going now on our new assessment at the beginnin when patient’s are admitted we start with the patient education and we look at the diagnosis that they come in with and other factors that may be contributing to the cause or maybe secondary and we pull the care plans and we look at different health education materials that we give the patient and start workin on it here; We have materials for, I guess you could say some of the most common diagnosis that we have if not then we go on and
search the web to see what kind of information we get and we make sure that it is easy reading;
We give it to the family and now if they can’t read, then we have to read it, explain to them but
we leave that information there with them so that in case they have someone at home or another
caretaker that they could give that to them and read it when they get home.

**Ga Ga:** I have never been asked to do that but every time I do the nursing assessment or the
admission assessment and the reassessment, that is basically what I was doing; You know the
readmission or every time you admit a patient that’s what you’re doing is assessing health
literacy…………….do they understand why they are here, do they understand what is wrong
with them, do they know what to do, and you hope they know and get better and you never see
them again but I don’t know that it ever dawned on me that that is what it was, but I don’t know
the whole thing I just don’t know.

**Flo:** Okay, we had a patient here about six months ago who was comatose, with a trach, a
diabetic, gastrostomy tube, a critical patient, but the family wanted to take her home and they
wanted her to be at home when she dies; So we had to teach them, the whole family; None of
them in the entire family had finished high school, I don’t think, but we called them all in here
and everyday for quite sometime the nurses worked with them…………..they got the family to
suction and provide care before the patient left here; For one week the family did everything just
like they were at home and we made them pretend they were at home and we just stood by.

**Sarge:** I never have; I mean they (nurses) expect me to assess their literacy when I take in
information and I let them know either can’t be taught or you have to really get down on a lower
level, basic, you know, level to get to these people, or you just need to keep reinforcing what we
have gone over.
**Dee:** Well, we just had a memo that was sent out from the Director of Nurses for the weekend people when the utilization review nurses are not here we have to evaluate and do the patient teaching and all that has to be made copies and all that has to be given to the patient and that has to be on the chart and documented for all admits.

**Barbara:** Many times the doctors will say, they talk to them and they will say see if they understand because they are going to send them home with a dressing or something; We had a little man who had an ulcer on his foot and we were going to do something special with the foot; One example, I can’t remember all of the details but it had to be do this and do that and then put a 2 by 2 on it and go and see if he understands because he is going to have to do that himself or somebody is going to have to help him; On almost every patient the doctors will say can they do this or that and you have to go and make sure that they or one of their family members can do it; So I guess I would have to say everyday, we have a patient that we take care of and we have to assess how they understand what they have to do.

The meaning units that I identified as most relevant to the guiding question, “Recently in your hospital, what have you seen in the assessment of the health literacy of a patient?” included the following statements:

**Jane Doe:** I know in the last year or two we have been doing a lot more with patient education which is pretty much what we call it here; We use to always narratively document what we taught patients but we changed to preprinted forms and all of that is new in the last year or so; I find that helps a lot for the patient to have something in their hands; The main thing was to make sure all patients would get the same information because there maybe one nurse who may come in and say one thing and then another nurse may say something else so the forms help with
that…………….there is no misunderstanding from one person to the next; I think we have done 
a lot to improve teaching but whether it is helping patients or not, I don’t know.

**Peggy Sue:** Not sure I understand the question………………our teaching is still in 
evolution……….we are still adding to our diseases and procedures and our medication teaching 
sheets……………..their reading material; Now I do know the hospital is talking about getting 
teaching videos……………..that sort of health thing.

**Delta Girl:** I’ve seen that quite a few of the patient’s think the old home remedies is the best 
thing next to medicines; We nurses talk all the time about our patients……………when I say talk 
all the time, I don’t mean gossipin, but I mean we discuss our patients when we are at work.

**Ga Ga:** Tremendous improvement, tremendous improvement in the hospital; We were going 
that way slowly because we needed to meet the quality indicators so we focused on teaching 
because that had some standardization so it was easier for me to have nurses and the staff to 
participate in this; We have a new nursing director, and she wanted to see more education and we 
had a growth in patient education and continuing improvements; I think our nurses educate their 
patients more and I have seen that with everyone……………teach and reteach and teach again 
until everybody is on the same page………………that’s the biggest change that I see.

**Flo:** In our hospital, we have recently developed and utilized new assessment forms that focus 
on assessing a patient’s health literacy level with questions on how do they learn best and how 
do they prefer their teaching materials; We also have new patient teaching handouts on disease 
processes and medications, written at the seventh grade reading level, that we give to all of our 
patients.

**Sarge:** I don’t know what that question means; We just probably reinforce it everyday, like I 
said.
**Dee:** Most patients are very receptive to it and most patients understand the information given to them and most of them get it and most of them are very appreciative of having the information given to them and want to participate in their own care and are accepting of teaching and they get it.

**Barbara:** I tell you, being the night supervisor normally I don’t need to take a patient assignment so I can float around and be available to everybody, but I’m hearing a lot of the nurses and when they go in they’ll teach a patient about fluid restrictions and daily weights and diet teaching…………..everybody is doing it; Seems like they’re doing it more now, you know, which I don’t know if I should say or not but we are. The nursing care plans may help a little more with patient teaching because on the congestive heart failure, it explains those fluid restrictions and puts them on their daily weights and explains thing maybe some nurses didn’t think about before but now they are keyed into it because it’s all written down on the care plan; Before, we use to write our care plans by hand and everybody would write a different one and it would be some of the same general points but all of the points weren’t be there…………..so now these more standardized care plans help with this. I think we are doin much better with the patient teaching because nurses are teaching more and some that I have never seen teach patients before will go in and sit down and talk to them about the fluid restrictions and stuff and explain why it is so important.

The meaning units that I identified as most relevant to the guiding question, “Tell me about a time where you shared information you had learned with another nurse about your understanding of health literacy.” included the following statements:

**Jane Doe:** Oh, I think of one of our newly diagnosed diabetics that we are having to teach, you know, how to do their accuchecks or how to do their injections…………..that is something we
would pass on in report; How they are progressing and how they are doing, what problems they are having, those kinds of things; Yes, sharing with the other nurse I guess; Okay, this is what I showed them what to do today and this is how they did with it so that they would know what they needed to show them so that they could continue so the patient could progress; A nursing care plan and change of shift report about how I was educating the patient and how they responded and about what else the patient needed to do to help themself.

Peggy Sue: I’m not really sure.

Delta Girl: I’ve seen that quite a few of the patients around here are back in the hospital to have support from us is one of the big areas that we talk about; We nurses talk about how patients cook with lot of salt, a lot of spices and eat a lot of fried foods and use the old home remedies and so I think those areas.

Ga Ga: I hear the nurses often teaching the certified nurses aides (CNA) who then also teach the patients and I can hear that from my office; You can hear the nurses teaching patients as I am walking up and down the halls doing chart reviews; They teach them, or the CNA will go to the nurses station and say the patient weighed 140 # yesterday and now today they are 114 #, so I hear everybody teaching more.

Flo: I told the nurses that patient education was a big focus and I’ve incorporated it into the admission and the daily assessment forms; Now each patient gets a folder with their medicines, you know, their diagnosis, and all that kind of stuff; With one patient we had a case meeting with all the nurses and we sat down and sort of brain stormed as nurses as to what the best way was to teach the family, and in fact one of the nurses actually developed a booklet and drew and cut pictures and that kind of stuff for them so we sort of just all sat down and my suggestions with them were to make sure we went to the family with a positive attitude and implied to the family
that they could do this and even if we would be a little disappointed or felt like they were not meeting the goals for the day that we would definitely put forth a positive attitude because I think that enhances learning.

**Sarge:** I’d say they (other nurses) taught me all about the changes in the insulin, and if it is humalog and the clear, the cloudy all that garbage, not the clear, the cloudy but the differences between the regular, the humalog and stuff like that and then the lovenox treatment with that little nitrogen bubble, in there, that I’ve been shootin out.

**Dee:** They have a couple of new nurses that are on right now that are new and just learning, so when I worked with them the other day and we had a new admit and she was just kind of following me and I just showed her how to find all the information (the teaching sheets) and what to give the patient and put on the chart.

**Barbara:** When I started doing these care plans and we first implemented them, you know, nurses are very reluctant to change; So I would have to explain and then there were 10 separate things but many of them have the same things incorporated into them so you don’t have to pull as many of them…………………………ineffective airway clearance, fluid overload and ineffective gas exchange, all those are similar; The impaired gas exchange and ineffective airway clearance have a lot of the same things incorporated in the same care plan with the interventions and such so I had to tell them the reason that I did this was to make it easier for us because we chart according to care plans so every care plan that is pulled you have to list it on the chart and identify what you are doing and how you are following the nursing care plan and the nurses are not use to doing that; I had done it before at other hospitals and some of the other nurses had done this before other places they worked; Here in this particular hospital they had never done that and like I said they use to write their own nursing care plans and some people would put
things in and they were all different so since I had done these care plans, about a year ago, I have to explain to the nurses but not in a demeaning way that these are really easy and you don’t have to pull all of them on the chart and if you have this type of one you really don’t need the other one because it has the same information as the other one and it is just easier for us nurses because then you only have to address just one problem and you don’t have to address two problems and it cuts down on; I think almost every night when I am available and if somebody needs help then I can explain to them about the patient teaching in the nursing care plan and just this past weekend somebody that I never thought I would see teaching a patient was in a room teaching a patient about fluid restriction; I told this particular nurse they really surprised me and you did a good job and you get the gold star for tonight.

The meaning units that I identified as most relevant to the guiding question, “On a typical work day, how do you assess the health literacy of patients you see?” included the following statements:

Jane Doe I think just talking with a patient trying to see how much do they know and what areas are they lacking that they need a little teaching; I guess I am mostly thinking of teaching them about their diseases and their medications because that is mostly what I deal with but sometimes it is on discharge planning on services they may need at home and we may need to set it up and what they may need at home like home health or equipment or teach them about a nebulizer if they have never had one and how to use it and do they know how to set it up; We do a lot of patient teaching; Yes mostly just talking to them and looking at their old records to see what they have come in with before and do I see a pattern of something like sometimes if someone is an asthmatic and they run out of their medicines, are they on their medicines and then a few days later they are back in the hospital; I try to educate them on their medicines and how if they don’t
take them they will end up in the hospital again; Pretty much how important it is to keep their
doctors appointments and take their medicines and call before they run out of them and try to
keep them healthy and call before they get very bad.

Peggy Sue: That would be just through conversation and talking to them and asking them
questions and listening to what they say but it would be a hands on thing; The patient itself
meaning not just looking at the chart but looking at the patient and asking the patient what and I
was getting read back from them; The patient is what you should focus on or that is what I would
focus on that day and that’s my goal is for you (patient) to learn what sodium is or for you to
learn what is fluid restriction or understand why you need to do this.

Delta Girl: I use the tool that we have and ask those questions but I also listen a lot cause as I
ask my questions I listen to see how they answer and if they don’t answer me appropriately or if
I think that the information is not correct then I try to maybe axed them a different way and I
keep changing my questions around and that tells me okay hey, somethin is wrong here; I don’t
give them anything to read cause you don’t want to make them feel threatened or what have you
but mostly by me just listening to the information that they have givin back to me you know and
a lot of times you can pick up on over half of the problem right there when you axed them a
question and listen for their answer because the questions that we ask I mean they are real simple
straight forward questions and is somethin that at first you would axed any patient you know
what I’m sayin; Basically how I pick up on it or sometimes another way that you can tell is axed
patients about their medicines and when they come here, with all their medicines bottle and they
got five or ten different pills in one bottle and the bottle is lookin all old, like it hadn’t been
changed since maybe 2000 or for a couple of years then I say to myself that we got a major
problem right here and most of the time you are not wrong you know with that; That’s something
they come in with uh, uh, I don’t want to say you prejude a person by the way that they look but that kind of gives you the information too until you start axing some of the questions.

**Ga Ga:** For me it is after the fact and it’s if I can look in the chart and understand what all the patient understands and if I can read the chart and feel comfortable with the nursing documentation and what the doctor dictated and if I can get out of it the whole story in a nutshell then that’s what I look for; I look in the chart for did the nurse talk to the patient, did the patient understand what they were told and did the doctor understand what the nurse told him and did the patient understand the doctor…………things like that; It is like a soap opera when you read the chart, you can go down and read it and sometimes I am not comfortable with what is written and what I read in the chart…………sometimes not everybody was on the same page and the patient suffered.

**Flo:** I make rounds pretty much everyday on all the patients; Normally when I go in and see the patient I’ll ask them how was you stay in here, is there anything we can do for you, anything you need to tell me that we need to discuss and if they are going home…………we are so small that I pretty much know what’s going on with everybody………………I will ask them…………like we had a new diabetic, 17-year-old, and I ask him and his mother before they left, how do you feel about going home, is there anything else that we need to do, do you feel like you have gained a lot of knowledge about your disease and medications; Of course we were continuing some outpatient stuff with that patient and we were referring him to a diabetic educator for outpatient visits, but I just always question them about did we teach what you needed to know, are you comfortable and I just come right out there and ask them this.

**Sarge:** Just what I said, I walk in and ask, what do you know about your admission diagnosis and that gives me an idea of about what level they’re at and how in depth or not in depth or
simple I should go……………then their education level and on our assessment form it has what grade did you complete; Okay, if I walk into the assessment and say……………we have a third grade education, guess what, they’re not gonna get some of these handouts and it is gonna be a lot simpler.

**Dee:** When I go in and assess the patient, especially if I have been off, I go in and I always look through the chart first before I go into the rooms and I see if the teaching stuff is on there and if not then I’ll pull it and when I go and make my rounds and I give it to the patient; A lot of patients still have the teaching forms still sittin on their bedside table and I usually ask them if they have read it and they usually say yea or no and stuff like that.

**Barbara:** Like I said you have to talk to them, you have to sit down and talk to them and I don’t know like I said before if it comes with experience or what but you get a feeling of what they are going to listen to and how you need to approach them; That’s all I can say you just have to set down and talk to the patient and see how you are going to teach and if you have someone in there that really doesn’t want to be there, they are goin be very angry or whatever and I’m not going to do a lot of teaching……………I’m just going to explain what I am doing and that’s it; I will ask if they have any questions and they will usually just snap and then I am going to just go and maybe the next day if they are in a better mood then we will try again.

**Themes**

I began the process of identifying themes by analyzing and reflecting on the meaning units from each participant. To ensure credibility and reliability of the themes, I engaged in the process of triangulation with colleagues. The triangulation analysts read the clustered meaning units and together we agreed on the identified themes. By reading and reflecting on the verbatim
transcripts, and comparing the meaning units to transcripts, I validated that the meaning units supported the themes. The themes are listed in table 2 below:

Table 2: Themes and descriptions of rural care Registered Nurses interpretation of health literacy and its affect on patient care.

<table>
<thead>
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<th>Theme</th>
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**Thematic Textural-Structural Descriptions**

I reviewed and reflected on the participants’ transcripts to verify the meanings units that support the identified themes. I constructed and analyzed textural and structural descriptions of what each participant experienced and how they experienced it. Moustakas (1994) referred to this process as phenomenological reflection, imaginative variation and analysis of the textural and structural components of the phenomena experienced. During the analysis, the study’s guiding questions were used for clarity and guidance. The triangulation analysts and I re-examined the
themes to ensure they were representative of the participant’s experiences. By analyzing the meaning units from the descriptive text and identifying themes, a cognitive map was created displaying each participant’s experience. Miles and Huberman (1994) described a cognitive map as representing a participant’s concepts about an experience showing relationships and descriptive words. The following is a thematic textural-structural description for each participant.

**Jane Doe**

Jane Doe, a Caucasian woman, was the first participant I interviewed. The interview was conducted in a hospital meeting room October 2006. Jane Doe graduated with a baccalaureate in nursing and has practiced as a RN for 11 years. She has worked at this rural acute care setting located in Southern Louisiana for 11 years. Jane Doe has experience in a variety of areas that include the emergency room, medical and telemetry floors, infection control and as the charge nurse. The typical patient Jane Doe cares for is over 60-years-old, has multiple health problems such as congestive heart failure, pneumonia, diabetes, and is sometimes dehydrated. As a charge nurse, Jane Doe supervises other RNs and LPNs who provide direct nursing care to patients. She also evaluates statistical data on hospital infections and implements strategies to decrease them in the role of infection control nurse.

Patient education is the term Jane Doe is familiar with and she does “not remember it being called health literacy.” She believes she first heard about patient teaching in nursing school and more recently in continuing education courses. Health literacy means the “patient being educated about their healthcare, their diseases, medications and everything to do with their healthcare”. Jane Doe believes it is important for the nurse to speak clearly and ask questions of patients to confirm their understanding of healthcare information. She often asks patients, “Do you have any questions, do you understand?” when performing patient education especially if
they have factors that effect their understanding of healthcare information. She believes that she always teaches patients about their diseases and “what they need to do to keep themselves healthy or as healthy as they can be”.

Jane Doe talks with patients and looks at their chart to see if there is a pattern in what the patient understands about their healthcare and their readmission into the hospital. Jane Doe shares patient teaching information with other nurses by talking and documenting a patient’s progress on a daily basis. She gives “a verbal report at change of shift report” and documents in the chart how the patient responded and what additional information needs to be taught. She believes that this system works well with the relationship between nurses but “sometimes things just don’t get passed on and maybe things that I would have passed on another nurse wouldn’t have, it just depends on the person and how everyone sees things just a little bit differently.” Sometimes she finds during her communication with other nurses that, “what I thought was important maybe they did not think was as important.”

Jane Doe believes she performs a thorough assessment of all of her patients. She does not remember being asked to specifically assess a patient’s health literacy and believes “it just seems like we always do that.” She uses the nursing assessment form during a patient’s admission into the hospital to assess their health literacy. Jane Doe understands that a patient’s education level and preference in manner that learning materials are presented appropriately determine their health literacy. During discharge planning, she “talks with a patient and try’s to see how much they know and what areas they are lacking in that they need a little teaching in.” Jane Doe also uses nursing care plans as a tool for patient teaching. She does not remember changing her system of assessing a patient’s health literacy, and now there are “more patient education forms and materials” at her hospital. Jane Doe believes that when all nurses use these new teaching
forms with patients that it helps to ensure “there is no misunderstanding from one nurse to the next” and appropriate patient teaching is occurring.

One day when working in the emergency room, Jane Doe encountered a 75-year-old female patient who had difficulty hearing and did not understand previous healthcare teaching about her blood pressure medications. The strategy she utilized with this patient was to speak clearly, loudly and ask the patient if she had any questions and did she understand. Overall, when Jane Doe encounters a patient who may not have understood their own disease processes or previous teaching, she looks at their chart, talks with the patient, asks them if they understand and they respond yes.

Barriers to participatory decision-making Jane Doe encounters include patients that can verbally state what is needed related to their healthcare and choose not to perform the skill and patients who say “they do not remember someone telling them to” perform care associated with their health. Jane Doe frequently experiences many patients who return to the rural hospital with the same problem and some because their condition or their particular disease became worse.

A barrier to empowerment, Jane Doe encounters is many rural patients bringing their children to the emergency room for treatment instead of a physician’s office. She states, “children with fever that come into the emergency room and most of the time if you ask the parents when have you last given anything to your child for the fever they say I gave nothing and most of the time when you ask them why they did not give any meds they say because I wanted you to see how high the fever was because if I give them something and then I come here and they don’t have any fever then you will not do anything for them.” Jane Doe experiences parents not giving fever medications to their children “very frustrating and to me that is an education thing and it is pretty common.”
Jane Doe sees empowerment as patients telling nurses and physicians that their medications are too expensive and “I can’t afford all of it” and “how much is this or is this one expensive.” Sometimes patients tell Jane Doe, “the medications are too expensive and I don’t want to take it.” In this situation, she spoke to the physician about changing the medication to one that was less expensive. She said the physician was agreeable because “they want them to take something so they will get better” and not immediately returns to the hospital.

Figure 1 is a thematic representation of Jane Doe’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Jane Doe, patient care and the relationships of nurse to patient, nurse to nurse and nurse to physician. Overall, she understood developing relationships with her patients had a positive impact on patient care. A disconnection between Jane Doe, health literacy and patient care is evident and negatively impacts patient care. Jane Doe did not have a complete understanding of health literacy and can not apply this knowledge in her patient care. Additionally, there exists a disconnection between Jane Doe, patient care, participatory decision-making and empowerment. Jane Doe believed she encouraged her patients to make decisions about healthcare issues but this was not demonstrated. Participatory decision-making barriers were present consisting of the non-compliant patients and patients not understanding their diseases or medications. Also there existed a disconnection between participatory decision-making and empowerment. Jane Doe believed she empowered her patients to participate in healthcare decisions but this was not demonstrated. One empowerment barrier consisted of the use of the emergency room by patients for non-emergencies. Overall, disconnections were demonstrated between Jane Doe, health literacy, participatory decision-making, empowerment, and patient care.
Barriers:
- Utilizing basic healthcare services in the emergency room

Enabling:
- Patients telling nurses/physicians their medications are too expensive

Figure 1. Conceptual Model of Jane Doe’s interpretation of health literacy and its effect on patient care
Peggy Sue

Peggy Sue, a Caucasian woman, was the second participant I interviewed. The interview was conducted in a hospital meeting room October 2006. Peggy Sue practiced as a Licensed Practical Nurse (LPN) for nine years before returning to school and graduating with an associate degree in nursing. During these practice years she cared for elderly patients who were in nursing homes. She has practiced as a RN for 12 years and has worked at this rural acute care setting located in Southern Louisiana for 12 years. She has experience in a variety of areas that include the emergency room, medical floor, endoscopy room, utilization review, safety director and as the charge nurse. The typical patient that she cares for in her practice is over 60-year and has either “congestive heart failure, pneumonia, or that sort of stuff.” In the endoscopy room, she administers conscious sedation to patients having colonoscopies and esophagogastroduodenoscopy (EGD) under the direction of a physician. In the areas of utilization review, Peggy Sue reviews patient records and performs patient discharge teaching. As safety director, she develops patient safety policies for the hospital. As a charge nurse, Peggy Sue supervises other RNs and LPNs who provide direct nursing care to patients.

Peggy Sue does “not remember hearing the term health literacy” and believes she heard it as patient teaching in her associate degree nursing program. She believes health literacy is “the ability to know what is going on and what their options are.” She believes it is important to involve family members in patient education and for home health nurses to visit with the patient after discharge. Peggy Sue uses return demonstrations, conversations, and listening to patient responses to verify their understanding of healthcare teaching. She looks for patient feedback to evaluate their understanding and then decides how to proceed with patient teaching. Peggy Sue provides hospital education forms about disease process and medications to all patients she cares
for in her practice. Additionally she often seeks written healthcare information from the internet for her patients. In the past two years, she believes there are more written patient educational materials at her Southern Louisiana rural hospital.

Peggy Sue believes all patients have a right to have “the knowledge to take care of themselves and have the knowledge to have informed consent.” She believes that nurses must teach their patients about their disease processes and medications and ultimately the patient will “make the proper choices according to what they know.” To assess her patients’ health literacy, Peggy Sue talks with her patients in general conversation using the hospital form and begins asking them how they are doing in the hospital. She listens to what the patients say and this provides an opportunity to evaluate their understanding of their disease and medications. Peggy Sue frequently asks her patients if they understand and they respond yes.

The hospital forms guide Peggy Sue’s relationships with her patients. She uses the hospital admission form to guide her assessment of the literacy level on her patients. This form addresses the following areas: level of education, primary language spoken, methods the patient best learns (visual, written, oral) and how the patient would like to receive teaching materials. Peggy Sue records the entire patient teaching she performs and any reinforcement of it on the nurse’s notes. This is one example of her relationship with other nurses.

Additionally, Peggy Sue’s relationship with other nurses includes communicating patient education information during change of shift reports and documentation. Peggy Sue often finds in her assessment of patients that “they don’t realize that it is also the sodium that is in the processed food and in the cheeses and the rest the food” which contributes to the CHF patients’ fluid overload. She notices that “when people come in to the hospital, they don’t just have diabetes, they also have high blood pressure and renal failure” and she incorporates all of the
appropriate patient education materials that address these problems and give them to the patient. Peggy Sue states to the researcher that “for the most part, I can’t answer for everybody but I can answer for myself” when referring to the incorporation of patient education materials.

Barriers to participatory decision making include patients who “are very attentive and want to hear and some of them you know are whatever” and have little desire to learn healthcare information. Another barrier is patients who do not understand their diseases or medications. When encountering these patients she believes “you make sure they do understand at least the basics of what they need to know to send them home” by talking to them and questioning them. After teaching these patients, they respond yes.

Jane Doe experienced one example of participatory decision-making with a patient. She worked with other nurses in teaching a caregiver how to provide full-time nursing care to a family member. The caregiver sought additional care for his dying family member when their health began to change. Peggy Sue remembers all of the nurses teaching the caregiver how to care for the tracheostomy and how the nurses “documented the teaching with a flow sheet.” Eventually the caregiver understood “exactly what to do and the patient did go home and later died from her cancer, but it was at home which was where they wanted to be.”

A barrier to empowerment Peggy Sue experiences is patients using the emergency room for routine healthcare; “I’m seeing them for my tooth aches or my head hurts or something like that. It’s not for the same thing. The emergency room is more like their doctor’s office than it is an emergency room.”

Figure 2 is a thematic representation of Peggy Sue’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Peggy Sue, patient care and the relationships of nurse to patient and nurse to nurse. Overall, she understood developing
relationships with her patients had a positive impact on patient care. A disconnection between Peggy Sue, health literacy and patient care is evident and negatively impacts patient care. Peggy Sue did not have a complete understanding of health literacy and can not apply this knowledge in her patient care. Additionally, there exists a disconnection between Peggy Sue, patient care, participatory decision-making and empowerment. Peggy Sue believed she encouraged her patients to make decisions about healthcare issues but this was not demonstrated. Participatory decision-making barriers were present consisting of the non-compliant patients and patients not understanding their diseases or medications. Peggy Sue experienced one participatory decision-making example with other nurses in teaching a caregiver. This was one isolated example and not consistently demonstrated. Also there existed a disconnection between participatory decision-making and empowerment. Peggy Sue believed she empowered her patients to participate in healthcare decisions but this was not demonstrated. One empowerment barrier consisted of the use of the emergency room by patients for non-emergencies. Overall, disconnections were demonstrated between Peggy Sue, health literacy, participatory decision-making, empowerment, and patient care.

**Delta Girl**

Delta Girl, an African-American woman, was the third participant I interviewed. The interview was conducted in a hospital meeting room October 2006. Delta Girl graduated with a baccalaureate in nursing and has practiced as a RN for 18 years. She has worked at this rural acute care setting located in Southern Louisiana for 18 years. Delta Girl has experience in a variety of areas that include the medical and telemetry floors, infection control and as the nurse educator. The typical patient that she cares for in her practice is over 60-years-old and has either “congestive heart failure, pneumonia, diabetes or dehydration.” As the infection control nurse
Peggy Sue
Patient Care

- Nurse to patient: right to know how to care for themselves
- Nurse to Nurse: Verbal and documentation reports, Not sure what other nurses do with teaching patients, Listen to patients, Disconnection of knowledge of health literacy

Barrier:
- Patients do not understand disease/medications
- Non-compliant patients
- Patient learning to care for family member

Definition: the ability to know what is going on and what their options are; Patient teaching
- Teaching about diseases/medications
- Involves family
- Return demonstrations, listening and verify patient responses
- Use of Nurse Tools

Figure 2. Conceptual Model of Peggy Sue’s interpretation of health literacy and its effect on patient care
she evaluates statistical data on hospital infections and implements strategies to decrease them. As the nurse educator, she develops and implements educational programs for the nurses at this Southern Louisiana rural acute care setting.

Delta Girl does “not remember hearing the term health literacy” and understands it to mean “holist nursing where you want to focus on the total picture of what is goin on and not just the physical part of the patient” in her baccalaureate nursing program. She also remembers reading about patient teaching, patient education and discharge planning as all being related to health literacy. She believes her primary goal as a nurse “is teaching the patient and getting them ready for discharge.” She also believes in involving the immediate caregiver in the patient teaching. Delta Girl remembers her experiences with patient education over her years as a RN. “Back then it was just okay to go into the room and talk to a patient, but now you give them the papers to go home and teach, teach, teach and did you remember to notify all these different persons. It is just different, now.”

Delta Girl understands health literacy as the manner in which a patient can mentally apply the healthcare information that they are given. The relationship she has with her patient is guided by her use of hospital forms. The admission form is utilized to assess every patient Delta Girl cares for in her practice. She believes these forms assess the literacy of a patient in general. Recently this rural acute care setting has acquired new patient education forms that Delta Girl gives to her patients and family members. She ascertains if either the patient or family members can not read the written teaching materials. Then she reads and explains the healthcare information to the patient and family members. Delta Girl listens to the patient responses and if they do not answer appropriately or “if I think that the information is not correct then I try to
maybe ask them a different way and I keep changing my questions around and that tell me if something is wrong.”

Delta Girl describes her relationship with other nurses as one when they are at work “nurses discuss our patients, not gossipin, about their care and patient teaching.” This communication occurs during change of shift report and through documentation on the patient charts. Delta Girl is careful with her relationship with physicians and “doesn’t want to be oversteppin to the doctor.” She describes her relationship with patients by saying, “you have to be a patient advocate but at the same time you don’t want to go over the doctor more or less.” When a patient asks a question about their healthcare treatment, she refers them to their physician for clarification.

Delta Girl describes an example of participatory decision making by a patient she encountered in her practice. This elderly man understood the home remedy of drinking pickle juice would bring down his blood pressure. Delta Girl explains to the patient that the pickle juice is high in salt and that this will increase his blood pressure. The patient responds by saying he is not sure about that and will talk to his doctor. She understand this patient understands has control of his healthcare decisions.

A barrier to participatory decision-making Delta Girl experiences is “non-compliance” in patients and she believes this contributes to these rural patients returning to the hospital. She further states, “some of our patients are poor people and are barley makin ends meet so they are gonna put that medicine to the side and make it stretch as far as they can cause you know they can’t do without lights, heat and air.”

Another barrier to participatory decision-making Delta Girl experiences is the use of rural folk health remedies by patients. Delta Girl believes this rural culture contributes to patients
returning to the hospital many times and many nurses refer to these patients as “frequent flyers.” These barriers prevent patients from actively engaging in their healthcare and making informed decisions about their care. Delta Girl believes that “how a patient is able to gather healthcare information and what they do with it once they receive it” is central to them being able to make appropriate decisions about their healthcare.

Figure 3 is a thematic representation of Delta Girl’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Delta Girl, patient care and the relationships of nurse to patient, nurse to nurse and nurse to physician. Overall, she understood developing relationships with her patients had a positive impact on patient care. A disconnection between Delta Girl, health literacy and patient care is evident and negatively impacts patient care. Delta Girl did not have a complete understanding of health literacy and cannot apply this knowledge in her patient care. Additionally, there exists a disconnection between Delta Girl, patient care, participatory decision-making and empowerment. Delta Girl believed she encouraged her patients to make decisions about healthcare issues but this was not demonstrated. Participatory decision-making barriers were present consisting of the non-compliant patients, patients not understanding their diseases or medications and patients using rural folk health remedies. Delta Girl experienced one participatory decision-making example when a patient sought verification of nurse given healthcare information from a physician. This was one isolated example and not consistently demonstrated. There were no examples of empowerment of patients. Also there existed a disconnection between participatory decision-making and empowerment. Overall, disconnections were demonstrated between Delta Girl, health literacy, participatory decision-making, empowerment, and patient care.
- Never heard of health literacy
Definition: holistic nursing where you want to focus on the total picture of what is going on and not just the physical part of the patient; how the patient can mentally apply health information
- Patient teaching and discharge
- Involves immediate caretaker

Barrier:
- Patients do not understand disease/medications
- Non-compliant patients
- Rural folk health remedies

Enabling:
- Patient sought verification of nurse given healthcare information from physician

Figure 3. Conceptual Model of Delta Girl’s interpretation of health literacy and its effect on patient care.
Ga Ga

Ga Ga, a Caucasian woman, was the fourth participant I interviewed. The interview was conducted in her office November 2006. Ga Ga graduated with an associate degree in nursing and has practiced as a RN for 33 and 1/2 years. She has practice experience in many different acute care facilities and in a community health setting in the Southern region of the United States. She has worked at this rural acute care setting located in Southern Louisiana on and off for 26 years. Ga Ga has experience in a variety of areas that include the medical and telemetry floors, charge nurse and currently as the quality assurance director/compliance officer/HIPPA officer. The typical patient that she cares for in her practice is over 60-years-old and has either “congestive heart failure, pneumonia, diabetes or dehydration.” As the quality assurance director/compliance officer/HIPPA officer she evaluates statistical data and hospital policy to ensure the hospital is meeting the appropriate standards. As a charge nurse, Ga Ga supervises other RNs and LPNs who provide direct nursing care to patients.

Ga Ga does not remember “it called health literacy” but does remember learning about teaching patients in nursing school. Patient education was encouraged by her clinical nursing faculty who encouraged her to teach the patient. Recently she remembers the term health literacy as paperwork nurse in quality assurance. Ga Ga believes health literacy means that patients “are informed, understand and know that they can ask questions.” Ga Ga strongly believes that patients have the right to ask questions and have as much healthcare knowledge as possible.

When caring for patients, Ga Ga states her relationship with the patient is that she assesses the health literacy in general on every patient she cares for in her practice by using the hospital assessment forms, asking the patient if they understand and the patient responds yes. While she has never been asked specifically to assess a patient’s health literacy, she believes that
is what she “does for every patient admission, nursing assessment and reassessment.” She describes how the hospital admission forms were developed because of the need to meet the quality indicators and standards. In the past two years, Ga Ga reports that the hospital has new education forms for the patients to read about their diseases and medications. She believes the hospital goal is to “teach and re-teach and teach again until everybody is on the same page.” Ga Ga describes her relationship with other nurses as hearing them teaching patients’ everyday. She recalls hearing a nurse tell a certified nurses aid (CNA) about the importance of a patients weight and also a CNA tell a nurse about an increase in a patient’s weight. Ga Ga describes her experience early in her nursing career were patients and their families were not given healthcare information and she believes “there shouldn’t be any more secrets with patient knowing about their healthcare.”

A barrier to participatory decision-making Ga Ga experienced was an elderly male patient she encountered as a young nurse in a rural community clinic. The patient suffered with asthma and came to the clinic with his wife for treatment. The patient was given a prescription for a rectal suppository to use when he was having trouble with his breathing. He and his wife did not understand how the medication was used and consequently he swallowed the rectal suppository. When he returned to the clinic the following week he stated the medication did not help his breathing and it hurt his throat when he swallowed it. Ga Ga believes as a young nurse, she did not appropriately teach the patient about his disease and the medication he was taking. She further states, “Don’t assume that patient’s understand what we tell them. That was my lesson.” Now she takes the time to talk with patients and explain their medications and provides them with written materials.
Another barrier to participatory decision-making Ga Ga experiences is that rural people “definitely have less intelligence and they are just different and you need to repeat the information over and over again because sometimes they don’t ask questions.” Another barrier she has experienced included patients who have English as a second language, non-compliant patients and that “country people don’t ask questions about their health.” All of these barriers prevent patients from actively engaging in their healthcare.

As the quality assurance director/compliance officer/HIPPA officer, Ga Ga monitors the repeat visits of patients in the rural acute care hospital. In the past year, she has noticed a decrease in the number of patients returning back to the hospital with the same health problem. Ga Ga believes the patients are empowered through the nurses teaching them about their diseases and medications which results in “the patient telling the home health nurses what they learned” during their hospital visit. She also sees patients seeking healthcare at the rural hospital “because they have new and different” problems.

Figure 4 is a thematic representation of Ga Ga’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Ga Ga, patient care, the relationships of nurse to patient and nurse to nurse, and empowerment of patients. Overall, she understood developing relationships with her patients had a positive impact on patient care. A disconnection between Ga Ga, health literacy and patient care is evident and negatively impacts patient care. Ga Ga did not have a complete understanding of health literacy and can not apply this knowledge in her patient care. Additionally, there exists a disconnection between Ga Ga, patient care, and participatory decision-making. Ga Ga believed she encouraged her patients to make decisions about healthcare issues but this was not demonstrated. Participatory decision-making barriers were present consisting of the non-compliant patients, patients not understanding
their diseases or medications, patients with English as a second language, and country people are non-questioning about their healthcare. Ga Ga experienced one example of empowerment of patients. This was one isolated example and not consistently demonstrated. Also there existed a disconnection between participatory decision-making and empowerment. Overall, disconnections were demonstrated between Ga Ga, health literacy, participatory decision-making, and patient care.

Flo

Flo, a Caucasian woman, was the fifth participant I interviewed. The interview was conducted in her office November 2006. She graduated with a master’s degree in nursing and has practiced as a RN for 29 years. She has practice experience in many different acute care facilities (medical, surgical, telemetry, intensive care (ICU)), home health, and in nursing education in the Southern region of the United States. She has worked at this rural acute care setting located in Southern Louisiana on and off for 10 years. Flo has experience in a variety of areas and is currently the Director of Nursing. She has worked with patients in an intensive care unit, telemetry, medical floors, home health, and teaching nursing in a university setting.

Flo first remembers hearing about health literacy “as a home health nurse” whose primary job is “to prevent and teach patients.” She believes health literacy is when an “individual is cognizant of what it takes to maintain a state of well being and being well informed.” She believes that the patient should be “well informed about caring for yourself.” With all patients she performs an assessment of their health literacy by asking questions, listening, watching their body language, asking how they learn best and presenting teaching material to the patient in that way. She has the patient return demonstrate the healthcare teaching to confirm their
- Never heard of health literacy but recently became aware in quality assurance
  Definition: Patients are informed, understand and ask questions about healthcare, patient teaching
  - Never asked to assess patient’s health literacy
  - Return demonstration

Enabling
- Patient telling home health nurses what they learned about diseases and medications

Figure 4. Conceptual Model of Ga Ga’s interpretation of health literacy and its effect on patient care
Understanding. Flo also involves the entire family in patient teaching and has a home health nurse follow-up at discharge. Flo has had success with patients understanding their medications by using a color marker system on which has helped them identify morning from evening meds. She does not believe she would teach patients differently because “my background in education helps a great deal.”

The relationship Flo has with her patients is by making nursing rounds, talking with patients and performing assessments on patients. During these nursing rounds she asks patients “how was your stay is there anything that I can do anything to discuss about your disease or medications and refer to diabetic educator, did we teach you what you need to know to understand and care for yourself.” Flo was instrumental in the development of the nursing assessment and patient education forms. She does not rely on these forms to direct her assessment of a patient’s health literacy. Flo looks at the patient’s “body language and asks them questions” and listens to their responses. She also tests them and has “them return demonstrate” the teaching that she presented to them and involves the family in all teaching activities. She also observes how a patient responds to her teaching and uses “constant repetitiveness” with the healthcare information. Flo describes one experience she had with a patient where she placed a “piece of paper in front of them and I said I was going to write the instructions down about what they needed to do and if they said to me well just tell me, then that was my que that they had a difficult time with the written word.”

Flo’s relationships with patients are that they respond best when many pictures are used in teaching. She further states, “I always made sure that I had accessible to me pictures that if they didn’t understand the steps of drawing up the insulin a picture book would suffice and so they could just follow the pictures and they would just turn the page and do that picture.” Flo’s
relationships with staff nurses are through communication about patient care in case meetings where they “brain storm the best ways to teach a patient and their family.”

An example of enabling participatory decision-making with patients is that Flo believes “everyone should have a definition of health.” She believes this personal definition would encourage patients to engage and participate in their healthcare. Flo has experience with the rural culture and understands that it is important “to get their trust” and “do not go in and force feed them” information but “allow them to participate” and make decisions about their own healthcare. This is another example of enabling participatory decision-making with patients.

Flo sees empowerment as giving rural patients the “opportunity to voice their understanding and tell me what they know and what they don’t know” about their disease and medications so that she can develop appropriate patient teaching. She believes that “the individual has got to be willing to accept the healthcare information and utilize it in a positive manner” and the “ultimate responsibility for making decisions about healthcare is with the patient.”

Flo’s experience with rural patients has contributed to her understanding and belief in empowering patients to have choices about their healthcare. She further explains, “we need to start with the school setting and teach children young what is health, the definition of health and what it is not because we are going to have a generation of really chronically ill individuals if we don’t.” Flo has seen what is happening to healthcare in rural areas “we are in a crisis in healthcare where there are just not enough beds in the hospital and our emergency rooms are full. People need to know when it is an appropriate time to come to the emergency room and when it is not and that’s a struggle especially with the rural population. Sometimes patients come here and they don’t really need to here and then sometimes they wait too long because transportation
is an issue and by the time they get here they should have been here a week ago.” Flo believes that “health literacy is an important topic” which can improve patient outcomes.

Figure 5 is a thematic representation of Flo’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Flo, patient care, relationships (nurse-patient and nurse-nurse), participatory decision-making and empowerment. Overall, Flo understood the definition of health literacy and was able to apply it in her patient care. Additionally Flo understood that developing relationships with her patients and with other nurses had a positive impact on patient care. There is a connection between Flo, health literacy, relationships, participatory decision-making and empowerment which all positively impacts patient care. Flo demonstrated engaging patients in participatory decision-making and the result was patient empowerment. There exists a balance and reciprocal relationship between Flo, patient care, health literacy, relationships, participatory decision-making and empowerment.

**Sarge**

Sarge, a Caucasian woman, was the sixth participant I interviewed. The interview was conducted in her office November 2006. She practiced as a Licensed Practical Nurse (LPN) for nine years before returning to school and graduating with an associate degree in nursing. She has practiced as a RN for five years. She has worked at this rural acute care setting located in Southern Louisiana for 5 years. Sarge has experience in a variety of areas that include the emergency room, medical floor, telemetry, and utilization review. The typical patient that she cares for in her practice is over 60-years-old and has either “congestive heart failure, pneumonia, or that sort of stuff.” In the areas of utilization review, Sarge reviews patient records and performs patient admission teaching.
Enabling:
- Patients to voice their own opinion of what they know or don’t know about their diseases
- Patient must be willing to accept health information and utilize information in a positive manner

Flo

Patient Care

- Understanding of health literacy (prevent and teach)
- Definition: informed decision making, knowledge of health to maintain well being
  - Asking questions, body language, how they learn best, presents teaching materials (based on their responses)
  - Involves the family
  - Home health follow-up
  - Return demonstration

- Nurse to patient: Talking with patients, listening, and assessments and teach re-teach
- Nurse to nurse: Verbal and documentation reports, nursing rounds, staff meetings to address best ways to teach patients and families

Empowerment

Health Literacy

Relationships

Enabling:
- Important to gain patients trust and allow them to make their own decisions
- Patient learning to care for family member
- Everyone should have personal definition of health

Participatory Decision-Making

Figure 5. Conceptual Model of Flo’s interpretation of health literacy and its effect on patient care.
Sarge remembers learning about patient education “in RN school” but never hearing the term health literacy. She believes health literacy is a “patient bein able to know basically what is wrong with them and how to take care of themselves and when to call the doctor.” She never remembers being asked to assess a patient’s health literacy and states the “nurses expect me to assess their literacy.” Sarge believes all nurses should “know about a patient’s admission diagnosis and their level of education” and this will guide patient teaching. When performing patient teaching she gives a patient printed simplified instructions and has them return demonstrate.

Sarge’s relationship with patients is directed by the hospital assessment form. She uses this to “assess the health literacy on all of our patients.” She experiences rural patients’ who have limited education and understanding of healthcare information. Sarge further states, “because we are rural and a lot of our people have no education and have a lower reading level, we really need to lower educational materials.” Sarge’s relationship with RNs is that of a student and teacher. Other RNs function in the role of mentor/teacher for Sarge. She speaks positively about her experiences with other nurses teaching and sharing nursing knowledge with her. The other RNs expect Sarge to assess the literacy level of her patients everyday.

A barrier to participatory decision-making is Sarge’s assessment of her patients. She states, “first I go in and ask them what do you know about it and they tell me and then I go a little bit further into depth if they are willing to listen or if they are willing to learn.” Additional examples of participatory decision-making barriers include Sarge judging the engagement of patient before continuing teaching and further states it is “part of the job.” Sarge is careful not to insult patients but “on the same hand you want to give them the information on a level that they’ll understand”. Sarge experiences many patients that are noncompliant and “pure dee
ignore” healthcare teaching. She believes this is part of the rural culture and that patients choose to take or not take their medications. These are all barriers to participatory decision-making.

A barrier to empowerment that Sarge experiences is patients “saying what they need to do about their healthcare” before they are discharged from the hospital and soon after discharge these same patients often return to the hospital with the same problem or similar problems relating to their disease. Sarge experiences frustration and tries to teach her patients about fluid retention and “what they need to do with it, particularly weighing themselves, takin their medicine, and when to call that doctor.” Sarge states, “all you can do is teach em here but actually makin them do it (take medications and perform treatment) at the house is two different things.” This barrier to empowerment contributes to patients’ repeat hospitalizations.

Figure 6 is a thematic representation of Sarge’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Sarge, patient care, the relationships of nurse to patient and nurse to nurse. Overall, she understood developing relationships with her patients had a positive impact on patient care. A disconnection between Sarge, health literacy and patient care is evident and negatively impacts patient care. Sarge did not have a complete understanding of health literacy and can not apply this knowledge in her patient care. Additionally, there exists a disconnection between Sarge, patient care, participatory decision-making and empowerment. Sarge believed she encouraged her patients to make decisions about healthcare issues but this was not demonstrated. Participatory decision-making barriers were present consisting of the non-compliant patients, patients not understanding their diseases or medications, judging the engagement of patients before she continued with teaching, and rural health culture. Also there existed a disconnection between participatory decision-making and empowerment. Empowerment barriers were present consisting of patients stating
before discharge what they needed to do about their healthcare and after discharge immediately returning to the hospital. Overall, disconnections were demonstrated between Sarge, health literacy, participatory decision-making, empowerment and patient care.

Dee

Dee, a Caucasian woman, was the seventh participant I interviewed. The interview was conducted in a hospital meeting room November 2006. She practiced as a Licensed Practical Nurse (LPN) for four years before returning to school and graduating with an associate degree in nursing. She has practiced as a RN for 17 years. She has worked at this rural acute care setting located in Southern Louisiana for six months. Dee has experience in a variety of areas that include the emergency room, medical and telemetry floors. Before beginning to work at this rural acute care setting, she was previously employed at a larger hospital located in the city. Dee cared for a variety of patients in the emergency room and telemetry units. She was also employed as a home health nurse in a rural community for approximately nine years where she cared for patients over 50-years-old and with multiple health problems such as diabetes, congestive heart failure, emphysema, peripheral vascular disease, and kidney disease. At this rural acute care setting in Southern Louisiana, the typical patient Dee cares for in her practice is over 60-year-old with multiple health problems such as “congestive heart failure, diabetics, wounds, pneumonia and respiratory patients.”

Dee never remembers hearing about the concept of health literacy, but does remember hearing about patient teaching and materials in RN school. She believes health literacy is for a patient “to be able to control and know everything in access to your health-being and to be aware of your own health and own care.” Dee’s experiences with patients is the use of hospital
- Never heard of health literacy
- Definition: patient knowing what is wrong with them, how to care for themselves and when to call the doctor
- Patient teaching
- Teaching about diseases/medication
- Return demonstration

Barrier:
- Patient states before discharge what they need to do about their healthcare
- Same patients repeat visits to hospital

Figure 6. Conceptual Model of Sarge’s interpretation of health literacy and its effect on patient care
admission forms to assess their health literacy and to provide patients with written literacy sheets about diseases and medications. If she encounters a patient that is illiterate, then she will read the health teaching information and “asks them if they understand” and she reports that the patients state that they do understand the health teaching. Dee believes that patient teaching would be performed best if “I had more picture items instead of using words or actual videotapes” of healthcare teaching. She is careful to “fill out the discharge forms and write them in terms that the patient will understand such as using “everyday” instead of the medical term “q day.” Dee is careful to write patient instructions “in layman’s terms so that they can read it” when they are at their home.

Dee describes her relationship with patients as teaching them with written healthcare information forms and reading to them and their family if they “learn best by listening.” Dee always looks at a patient’s chart to see what previous teaching has occurred and always documents her patient teaching. Dee’s relationship with RNs impacts her relationship with patients. She describes receiving a memo about patient teaching, “we just had a memo that was sent out for the weekend people, when the utilization review staff are not here, then we have to evaluate and do the patient teaching and all of that has to be copied and given to the patient and documented and put on the chart and for all admits.” Dee also has experienced mentoring new nurses in the use of patient teaching forms and nursing care plans.

Barriers to participatory decision-making include Dee experiencing patients who do not understand their diseases and medications and providing patients with healthcare teaching materials. She states, “I put them in the room and if they have questions then I say I’ll be in and out of the room for them to ask questions after they read it.” Dee reports that “most patients are
very receptive to teaching and they understand it and are nice about it.” Dee further states “most patient’s understand and tell you or they say they understand you” when performing patient teaching.

Another barrier to participatory decision-making Dee experiences is patients returning to the rural acute care setting. She states, “we do get those repeat patients, over and over again.” She speculates that, “probably a lot of those repeating patients, are not doin their follow up visits with their doctor or they are not compliant at home or they have diabetes or heart failure.” She explains that these patients understand their health conditions and treatments but choose not to see their physician.

A barrier to patient empowerment that Dee experiences is patients visiting the emergency room with non-emergency issues. She believes these patients are empowered to seek medical attention at the rural acute care setting and this is part of the rural health culture.

Figure 7 is a thematic representation of Dee’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Dee, patient care, the relationships of nurse to patient and nurse to nurse. Overall, she understood developing relationships with her patients had a positive impact on patient care. A disconnection between Dee, health literacy and patient care is evident and negatively impacts patient care. Dee did not have a complete understanding of health literacy and can not apply this knowledge in her patient care. Additionally, there exists a disconnection between Dee, patient care, participatory decision-making and empowerment. Dee believed she encouraged her patients to make decisions about healthcare issues but this was not demonstrated. Participatory decision-making barriers were present consisting of patients not understanding their diseases or medications, rural health culture and giving patients written handouts and then waiting to see if they will ask her any questions.
Also there existed a disconnection between participatory decision-making and empowerment. Empowerment barriers were present consisting of patients utilizing basic healthcare services in the emergency room. Overall, disconnections were demonstrated between Dee, health literacy, participatory decision-making, empowerment and patient care.

**Barbara**

Barbara, a Caucasian woman, was the eighth participant I interviewed. The interview was conducted in a hospital meeting room January 2007. She graduated with a diploma degree in nursing and has practiced as a RN for 25 years. She has practice experience in many different acute care facilities in the Northeastern region of the United States in rural areas. Specifically, Barbara has practiced in the areas of orthopedics, oncology, intensive care (ICU), telemetry and medical-surgical units. She has worked at this rural acute care setting located in Southern Louisiana for 10 years on the medical and telemetry units, in the emergency room and as the charge nurse. The typical patient she has provided nursing care to is over the age of 60 years with congestive heart failure, pneumonia, diabetes, and chronic obstructive pulmonary disease.

Barbara has “never heard of health literacy” but remembers hearing it as patient education, patient teaching and home health in nursing school. She believes health literacy is “patient teaching and keep patients informed and in a way that they can understand.” Barbara also states every “patient has the right to understand everything” about their healthcare. She assesses every patient for teaching and attempts to “figure out how you are going to explain things to patients.” Barbara’s experience is that the assessment of a patient’s health literacy level is something which is performed everyday. She states “that everyday we have a patient that we take care of and we have to assess how they understand what they have to do to care for themselves.” Barbara involves family members in the patient’s healthcare teaching.
Barriers:
- Utilizing basic healthcare services in the emergency room
- Patients do not understand disease/medications
- Gives patient written handouts and then waits to see if they will ask her questions.
- Rural health culture

Definition: be aware of your own health and own care healthcare.
- Patient’s controlling their healthcare
- Teaching about diseases/medications

Figure 7. Conceptual Model of Dee’s interpretation of health literacy and its effect on patient care
Barbara’s relationship with her patients is guided by nurse developed tools. The primary method Barbara uses to assess a patient’s “literacy is by looking at patients and seeing if they understand.” In the emergency room, she uses “printed instructions and highlights them with a marker and writes different instructions on there” to discharged patients. Barbara’s experience with patient education is “it depends on what the patient is like as to how I go about what I teach them.” She explains that in this rural area, “we see a lot of elderly people that aren’t really well educated, maybe the 8th grade education, so you have to talk to them like a teenager.”

Barbara’s relationship with physicians and other nurses impact her relationships with the patients she encounters in her practice. For example, Barbara describes her experience with physicians as one where she is requested to “talk with patients and see if they understand healthcare teaching and if they can care for themselves.” Barbara’s relationship to nurses is to “explain about the patient teaching in the hospital nursing care plans (NCP).” Barbara was instrumental in developing nursing care plans for this rural hospital and believes nurses are “doing more patient teaching because of nursing care plans (NCP).” These nursing care plans ensure that all nurses are teaching patients the same content about their disease processes and medications. Barbara’s experience is that “we are doin much better with the patient teaching because people are teaching more even ones who have previously never taught patients before.” She further explains that it has been difficult to convince the nurses of the value of NCP because “nurses are very reluctant to change.” Additionally, Barbara communicates with other nurses in change of shift reports and through documentation in the patient’s hospital chart.

Barbara believes that all patients should participate and make decisions about their personal healthcare. Barriers to participatory decision-making she experiences are assessing patients and deciding on what they look like as to how she will teach them and getting “a feeling
of whether the patient is going to understand you or not and if they can seem like they can understand then I will explain things normally, repeat things and ask if they have questions.” She further states, “Depend on what they look like as to how I go and what I teach them.” Barbara talks to patients and “gets a feeling of what they are going to listen to and how you need to approach them” and also whether or not “the patient receptive to teaching.”

Another barrier to participatory decision-making is determining if a patient has the desire to learn about their healthcare. Barbara determines if a patient is interested in healthcare information by observing their responses during the teaching. For example, she states, “some people just don’t want to, you know, they start talking on the phone or start digging in their purse and they just don’t want to hear you or they just ignore you.” Barbara also experiences non-compliant patients who do not want to understand their diseases or medications.

A barrier to patient empowerment that Barbara experienced was an elderly patient with a foot wound, who needed to keep it elevated, clean and dry. The patient stated, “I’m just going to wash it and put my sock and shoe on and go to work, and if it gets too bad, I’ll go to the emergency room.”. This patient utilized the emergency room for his primary healthcare.

Examples of patient empowerment Barbara experienced include, “many COPD and CHF patients can tell you when a spell is coming on and I try to make them aware of it and tell them if you start to see your feet swell a little before you get to the point that you are gasping for air, then call your doctor because maybe he will tell you to take an extra fluid pill.” Another CHF patient Barbara encountered stated, “he could tell he was getting sick because he couldn’t bend over to tie his shoes and he would have to grab the laces with something.” She continued her teaching with this patient by stating, “Yes, you are right, if you can’t bend over and tie your shoes, then you need to call your doctor. Get medical treatment right away and don’t let it get too
bad.” Barbara believes it is important to empower patients with healthcare teaching so that they will seek medical treatment before their condition becomes critical.

Figure 8 is a thematic representation of Barbara’s interpretation of health literacy and its effect on patient care. There is a connection demonstrated between Barbara, patient care, the relationships of nurse to patient, nurse to nurse and nurse to physician and empowerment. Overall, she understood developing relationships with her patients had a positive impact on patient care. A disconnection between Barbara, health literacy and patient care is evident and negatively impacts patient care. Barbara did not have a complete understanding of health literacy and can not apply this knowledge in her patient care. Additionally, there exists a disconnection between Barbara, patient care, participatory decision-making and empowerment. Barbara believed she encouraged her patients to make decisions about healthcare issues but this was not demonstrated. Participatory decision-making barriers were present consisting of the non-compliant patients, judging the engagement of patients before she continued with teaching, and rural health culture. Also there existed a disconnection between participatory decision-making and empowerment. A barrier to empowerment was patients utilizing the emergency room for basic healthcare. Empowerment was demonstrated by patient acting to prevent their health from declining. Overall, disconnections were demonstrated between Barbara, health literacy, participatory decision-making, and patient care and participatory decision-making and empowerment.
Barrier
- Utilizing basic healthcare services in the emergency room

Enabling
- Patient actions to prevent health from declining

Barbara

Patient Care

Health Literacy
- Never heard of health literacy, thinks it patient teaching
- Definition: patient teaching and keeping patients informed in a way that they can understand
- Teaching about diseases/medications
- “Feeling” about patient teaching
- Involves family in teaching

Empowerment

Barriers:
- Depends on what they look like as to how I go what I teach them
- Talks to them and gets a feeling of what they are going to listen to and how to approach them and whether or not they are receptive to teaching.
- Non-compliant patients
- Rural health culture

Relationships
- Nurse to Patient: Utilizes nurse tools, Disconnection of knowledge of Health Literacy
- Nurse to Nurse: Nursing care plans, Verbal and documentation reports, Nurses doing the same with teaching
- Nurse to physician: Directed by physicians to see if patient understands healthcare teaching

Participatory Decision-Making

Figure 8. Conceptual Model of Barbara’s interpretation of health literacy and its effect on patient care
Composite Thematic Textural-Structural Descriptions

A composite thematic textural-structural description was constructed which reflects the entire participant’s experiences (Moustakas, 1994). This description is the synthesis of meanings and essences of the RNs experiences. Following the descriptions, a conceptual model of the composite meaning for all the rural care RNs is presented.

Most of the RNs understood health literacy as performing patient teaching or patient education. In addition, participants described patient teaching as the ability of patients to understand their disease processes and their medications. In general, they agreed that the ability of patients to care for themselves was the most important part of patient education. Participants also considered it important to inform patients about their healthcare. One participant spoke of health literacy as providing holistic nursing care to the entire patient. Another participant spoke of their experiences in home health nursing and how important it was to understand a patient’s health literacy level before performing healthcare teaching. Most of Registered Nurses in this study did not have a complete understanding of health literacy.

The relationship between the participants and their patients evolved around nurse developed assessment tools. Some of the questions on this tool address how a patient would like teaching information presented and how do they learn best. These questions focus on the literacy level of the patient. The Registered Nurses who use this hospital assessment tool understand that it appropriately assesses their patient’s health literacy. A few participants understood that knowing a patient’s educational level indicates their health literacy or literacy level. The Registered Nurses in this study never mentioned any instruments that assess health literacy.

The relationship between the Registered Nurses and their patients was impacted by their relationships with other healthcare professionals. Most participants described their interactions
with other nurses as communication which occurred during change of shift reports, documentation in patient charts, and with nursing care plans. One participant described their relationship with other Registered Nurses through communication that occurred at patient case meetings and nursing rounds. One Registered Nurse spoke of her relationship with physicians as being directed to assess a patient’s understanding of healthcare teaching. Another Registered Nurse described her concern of remaining in a dependent role and not threatening the physician by functioning independently. Most participants described their relationships with their patients in terms of the use of hospital tools, nursing care plans and patient documentation.

The participants described their experiences with participatory decision-making and their patients. Several participants described that patients almost always stated they understood their healthcare teaching yet they also reported these same patients frequently returning to the rural acute care hospital. These Registered Nurses believed that if a patient said that they understood the healthcare teaching they were given; then they thought the patient truly understood. There is a disconnection between the participants’ knowledge and application of their awareness and assessment of health literacy.

The goal of teaching for all participants is for their patients to make informed decisions about their healthcare. In addition, one participant described the importance of a patient’s ability to have control over their healthcare experiences. Most Registered Nurses viewed their patients as interested or not interested in their healthcare teaching. Several Registered Nurses assessed whether or not their patients were engaged or cooperative before deciding to proceed with patient teaching. One participant described the importance of all individuals having a personal definition of health in which they live. She further believes that it would encourage patients to actively participate in their healthcare. Some Registered Nurses describe that their patients actively seek
healthcare information from other professionals, family members, friends and the internet. Additionally, one participant described the rural culture of using home remedies for treatment which created an increase in the patient’s blood pressure.

The participants described their experiences with empowerment and their patients. The participants described teaching their patients how to recognize changes in their health so that they could seek healthcare before their condition became worse. However, several Registered Nurses spoke of being frustrated that their patients continued to wait too long to seek healthcare and to frequently use the emergency room for their primary healthcare. One Registered Nurse described how a patient recognized his health condition was becoming worse and proactively sought healthcare treatment. Another participant expressed the view that she encouraged patients to voice their own opinion of what they know and do not know about their diseases. This participant also believes that patients must be willing to accept health information and utilize the information in a positive manner.

The diagram shown in Figure 9 is a composite thematic textural structural representation of the meaning of rural care RNs interpretation of health literacy and its effect on patient care. The RNs in this study demonstrated a connection between RN, patient care and the relationships of nurse to patient, nurse to nurse and nurse to physician. Overall, the RNs understood developing relationships with their patient had a positive impact on patient care. A disconnection between the RNs, health literacy and patient care is evident and negatively impacts patient care. The RNs do not have a complete understanding of health literacy and can not apply this knowledge in their patient care. Additionally, there exists a disconnection between the RN, patient care, participatory decision-making and empowerment. The RNs in this study believed they were encouraging their patient’s to make decisions about healthcare issues but this was not
demonstrated. Barriers were present consisting of the rural health culture, non-compliant patients and the RNs engagement of a patient depending on the current circumstances. Also there existed a disconnection between participatory decision-making and empowerment. The RNs believed they were empowering their patient’s to participate in healthcare decisions but this was not demonstrated. Barriers were present consisting of the use of the emergency room for non-emergencies; patient’s verbalizing understanding of health issues prior to discharge and soon returning to the hospital. Overall, disconnections were demonstrated between the RN, health literacy, participatory decision-making, empowerment, and patient care.
Figure 9. Conceptual Model of Composite Meaning of Rural Care RNs Model of Interpretation of health literacy and its effect on patient care
CHAPTER 5

SUMMARY, OUTCOMES AND IMPLICATIONS

This chapter summarizes the research findings from this phenomenological study, the outcomes and implications for nursing and research. The summary of the research section is organized by chapters. The outcome and implication sections are presented by the themes that emerged from the research data and were discussed in relation to the review of literature. Additionally, the implications of the outcomes for this study are discussed in terms of nursing education, practice and research.

Summary

In chapter one, I began with an introduction of health literacy and an overview of the major reports describing its impact on an individual’s healthcare. Health literacy is the ability of an individual to understand health information and function within the healthcare system. Today, patients are required to monitor their disease, utilize the proper healthcare facilities, and regulate their treatments and medications (Parker et al., 1999). Patients who have inadequate health literacy and do not have the ability to follow basic instructions have great difficulty navigating the healthcare system (Fetter, 1999). Health literacy is a patient’s currency for understanding and utilizing this system (Parker et al., 1999). Registered Nurses must be able to accurately assess a patient’s health literacy in order to ensure they have the optimal currency for understanding and navigating the healthcare system (Parker et al., 1999). The purpose of this research study was to explore rural care RNs’ interpretation of health literacy and its effect on patient care. I defined the terms and the limitations for this study. Next I discussed the significance for this research study which was that patients today need the ability to quickly understand and effectively evaluate healthcare information from multiple sources. A patient’s limited time with healthcare
professionals and experiences in multiple healthcare settings are both challenges patients experience. A patient’s health literacy skills directly impact their healthcare status and quality of life. I concluded the chapter stating that all RNs have an ethical responsibility to provide healthcare information that is understandable and enables a patient to make informed decisions regarding their healthcare.

In chapter two, I presented a review of the literature on the concept of health literacy. First I discussed the definition of health literacy followed by several reports on literacy and health literacy. Literacy is not the same concept as health literacy, but the two are intrinsically linked with research studies demonstrating that individuals with low literacy skills also have low health literacy skills. Several studies were presented stating that low health literacy is prevalent and has a negative impact on health outcomes. There are several assessment instruments for health literacy used in healthcare. Registered Nurses utilize the nursing process in the form of nursing care plans to assess the patients they care for. Patients have cognitive, emotional, sensory, and physical impairments that influence their health literacy assessment. Patients’ in rural areas are part of a health culture that do not have the resources and knowledge to actively participate in their healthcare. Registered Nurses have the opportunity to teach and empower these patients to engage in their health and care. I concluded the chapter by summarizing that a patient’s health status, health knowledge and use of healthcare services are all related to health literacy. The foundation for providing safe and competent care to all patients is the RNs’ ability to adequately assess their health literacy.

In chapter three I explained the methodological design for this research study. I began this process by describing the origins of qualitative research and the phenomenological paradigm. I discussed the appropriateness of using a phenomenological lens for this study. I
discussed the sampling strategy, collection and management of data. The credibility was established and the role of the researcher was described with a personal biography. The protection for human subjects and confidentiality was observed. Ethical dilemmas that might occur during the interview process were discussed. A review of the literature directed the development of guiding questions. I concluded the chapter by discussing my utilization of the Van Kaam Method to organize, analyze and synthesize the collected data.

In chapter four I discussed how I collected data through participant interviews and derived meaning units from the verbatim transcripts. The process of horizontalization was utilized in the identification of meaning units. Next, the triangulation analysts and I identified themes from the meaning units and agreed they were supported by the participants’ statements. The emerging themes were patient education, the nurse and patient relationship, participatory decision making, and empowerment. A thematic textural-structural description was created for each participant by utilizing the process of phenomenological reflection, imaginative variation and analysis of the textural and structural components of the phenomena experienced. A cognitive map was developed displaying each rural care RNs’ interpretation of health literacy and its affect on patient care. Finally I concluded chapter four with a composite thematic textural-structural description which was developed from all of the rural care RNs’ individual thematic textural-structural descriptions in addition to composite cognitive map.

**Outcomes and Implications**

The outcomes and implications of this phenomenological study are presented as the themes that emerged from the organizing, analyzing and synthesizing of data. I compared the four identified themes and descriptions to the relevant literature presented in chapter two and discussed the implications for nursing education, practice and research.
Most of the rural care RNs in this study were not aware of the concept of health literacy and could not provide a complete definition of the term. Overall the participants in this study understood the concept of health literacy in terms of teaching and educating their patients. While the term health literacy was first used in 1974, it has only recently appeared consistently in healthcare literature. So it is not surprising that rural care RNs may not be familiar with the term health literacy. They spoke in terms of assessing and performing patient teaching and patient education. Additionally, RNs in this study did not have any awareness or knowledge of health literacy assessment instruments. Several participants described that patients almost always stated they understood their healthcare teaching yet they also reported these same patients frequently returning to the rural acute care hospital. There exists a disconnection of the RNs understanding of health literacy and without knowledge there is no opportunity for the RN to apply in practice. This disconnection between RNs knowledge and application of health literacy is not surprising. Several studies discuss health literacy assessment instruments and their effectiveness in assessing an individual’s health literacy in healthcare settings. These rural care RNs have failed to incorporate relevant healthcare research into nursing practice. The development of web-based educational program focusing on health literacy would increase the knowledge base for these rural care participants.

The RNs utilized a hospital assessment tool specific to their facility. Most expressed the idea that this tool assessed a patient’s teaching ability and that their educational level indicated they would have problems understanding healthcare information. What actually occurred when the RNs were using the hospital tool was the assessment of their patient’s literacy level. While literacy and health literacy are distinct and different concepts, studies consistently report that they are linked together as often patients who have poor literacy also have limited health literacy.
Health literacy has a broader focus, and it encompasses issues such as health culture, individuality, and contextual situations. Health literacy influences how patients understand wellness and illness, participate in health promotion and health prevention activities, and follow treatment regimes and self-care instructions. Most RNs in this study spoke of using a nurse-developed tool to inquire about the number of years their patients completed in school, and this would indicate their health literacy level. This question is an assessment of a patient’s literacy which is related to their health literacy. The RNs were not aware that an individual may read two to four grade levels lower than their highest educational level. Most of the RNs in this study assessment of their patients were directed by the hospital teaching forms which primarily assessed literacy.

If nursing assessments in rural areas are form driven, then these forms should be developed considering the assessment of a patient’s health literacy. Individuals who are at risk for limited health literacy are individuals with low literacy, who are elderly, who have sensory deficits, who have cognitive impairments, who are immigrants, from racial and ethnic minority groups, who are poor and homeless, who are prisoners, who are military recruits and with limited education (Schwartzberg, VanGeest, & Wang, 2005). In addition, patients in healthcare settings are often experiencing illness and may be in pain, have stress and be fearful. All nurses must become aware of these individuals who are at risk for limited health literacy and the contextual situations that occur that contribute to limited health literacy. All RNs must incorporate the assessment of health literacy into their patient care. Advanced Practiced nurses could develop tools for use in healthcare settings that are practical and assess the health literacy of all patients.

Additional signs that may indicate a patient has low literacy and thus be at risk for limited health literacy are: forgetting eye glasses, always have a headache when asks to read, regularly
bring family/friends to help with paperwork, identify medications by looking at the pill not the
label, asking a lot of the same questions covered in handouts/brochures, incomplete healthcare
forms, non-compliance patients, missed healthcare appointments, and the inability to verbalize
basic information related to health status, health history, and treatment. These patient situations
often occur in healthcare settings and RNs may not be aware of the meaning of them. Continuing
education within the community and healthcare setting can increase health literacy awareness for
nurses.

Some RNs in this study spoke of nursing interventions they employed during patient
education to confirm the patients had adequate health literacy. Many of the RNs verified if their
patient understood healthcare teaching by asking, “do you understand.” If the patient responded
yes and had a positive attitude, then the RNs believed they understood healthcare teaching. This
type of nursing intervention is not very effective with patients who have limited health literacy.
It is important for RNs to remember that individuals with limited health literacy and low literacy
skills can suffer from shame associated with this and will agree with anything the healthcare
professional says in order to avoid this being discovered (Parikh, Nurss, Baker & Williams,
1996). Therefore the RN should utilize several assessment techniques for health literacy and
implement patient teaching that includes written, visual, auditory, and kinesthetic materials.

Some RNs in this study spoke of other nursing interventions they utilized after a teaching
encounter to ensure a patient had adequate health literacy. These included asking the patient to
teach back the healthcare information to the RN and watching the patient return demonstrate the
healthcare activity. Studies confirm that these health literacy strategies are effective with
patients. Additional effective nursing interventions for ensuring health literacy include asking for
patient feedback, often in the teaching session and early talking and critically listening to the
patient, and confirming understanding of what the patient said. Registered Nurses can also confirm a patient’s understanding of healthcare information by asking the following questions:

Can you tell me what you like or don’t like about ______?; When it says ______, what does this mean to you?; Is ____ something you would be likely to do?; Why do you believe it is important for people to know about _____?; Would you show me how you will do ____?; May I watch as you follow these instructions or read this booklet?; What (if anything) did we leave out, which should be included? (Osborne, 2005).

The relationship between the RNs and their patients was impacted by their relationships with other healthcare professionals. Most participants described their interactions with other nurses as positive communication which occurred during change of shift reports, documentation in patient charts, and with nursing care plans. Some RNs spoke of being unsure of the performance of other nurses and did not want to be perceived as performing below standard. Most RNs spoke of their relationship with physicians as being directed to assess a patient’s understanding of healthcare teaching and not their health literacy level. Another RN described her concern of remaining in a dependent role and not threatening the physician by functioning independently. Nursing education should include in their curriculum activities that promote problem solving and independence in nursing students. In addition, rural RNs must be encouraged to obtain a baccalaureate degree in nursing.

Most of the RNs in this study spoke of the importance of talking with patients and encouraging them to become involved in their healthcare. However, several of the RNs described these relationships in terms of their use of hospital tools, nursing care plans and patient documentation. Studies consistently reported the importance of RNs developing a nurse-patient partnership in the healthcare setting which include sharing power and negotiation. While the
participants in this study spoke of having conversations with their patients, nothing emerged from the data that indicated they had developed a nurse-patient partnership. What did emerge was a one-sided conversation with the patient responding dichotomously, yes or no. Additional research is needed to confirm this finding.

Overall, the RNs in this study did not understand the connection between a patient’s health literacy and their overall participation in their healthcare. There was one RN who did articulate an understanding of health literacy and its connection between a patient’s health and their participation in healthcare. Today, rural individuals and their families are required to assume a greater responsibility for their healthcare. Patients in rural areas may not have the resources or skills to engage in participatory decision-making and make informed decisions about their healthcare. RNs in this study expressed the desire to encourage their patients to become engaged in their healthcare and make decisions about their care. One RN goal for patient teaching was to promote the patient to have control over their healthcare. Most of the RNs in this study experienced non-compliant patients who returned often to the rural acute care setting for medical and nursing treatment. One RN experienced a patient that was engaged in their healthcare decisions and sought additional information from another healthcare professional. This information appraisal by the patient demonstrated their participation in their healthcare. Overall, most RNs experienced patients who had limited health literacy and limited literacy skills. While they recognized the responsibility of educating all patients, the RNs expressed frustration that the health message was not received by the patient. A health literacy web site with practical tips for health literacy assessment and teaching would enable practicing rural care RNs to utilize this information in their patient care.
Studies confirmed that rural individuals with limited English proficiency have reported a decreased satisfaction with their healthcare experiences, difficulty communicating with physicians, and a decrease in their participation in healthcare decisions. One RN in this study experienced some patients with limited English proficiency, and she described using a translator when providing nursing care. RNs are often the first healthcare professionals these patients encounter. It is important for RNs to engage these rural patients in participating and making decisions in their own healthcare. Rural health culture and health literacy influence the content and outcomes of all nurse-patient partnerships.

In today’s healthcare environment, rural patients tend to be older, have less contact with professionals and have more chronic illness and disabilities. The rural health culture impacts individuals living in rural areas. Sometimes these rural individuals utilize home folk remedies for medical treatment. Studies suggest that rural elderly individuals limited access to healthcare and their ability of self-sufficiency may contribute to their use of folk home remedies. A few nurses in this study had experienced caring for patients who had utilized home folk remedies. The RNs expressed their concern for the adverse effect on the patient’s health and the patient’s lack of understanding of their healthcare teaching. Registered Nurses can incorporate a patient’s rural health culture and health literacy into their patient care teaching.

Health literacy problems have grown as the United States healthcare system has become more complex. The goal of every healthcare professional is adequate health literacy for all people. Health literacy is the currency that will empower individuals to participate in their healthcare. Empowerment refers to the ability of an individual to have control and make decisions over their personal life. When this concept is applied to the healthcare setting it includes an individual’s ability to have choices, have control and make decisions about their
health. One RN in this study spoke of one patient who noticed that his body was beginning to retain fluid by his inability to bend over and tie his shoes. When this happened, the patient then understood that they needed to call his doctor. This is an example of understanding one’s health and seeking appropriate medical attention. Most of the RNs spoke of wanting their patients to recognize a change in their health status and seeking appropriate medical care sooner rather than later. Also, most RNs expressed the desire for patients to make informed choices about their healthcare. Overall, most of the RNs’ experiences did not reveal that patients were aware or informed about their healthcare and that they did not understand that they could make healthcare choices. One RN spoke of how overall rural patients did not ask any questions about their health teaching and just accepted whatever information that they were given. In order for patients to have improved health outcomes they must achieve critical health literacy which will empower them to make decisions and actively participate in their healthcare. In order to achieve adequate health literacy, patients must be able to understand their diseases and medications, recognize a change in their health status, understand when to seek appropriate healthcare, have choices about their health, and participate in making informed decisions about their healthcare.

One participant in this study expressed the need for all individuals to develop their own definition of health. A RN could work with a patient to help them create their own personal definition of health in an acute care or rural community setting. Then the RN could individualize their nursing care around the patient’s personal definition of health. This process would encourage patients to become engaged in the participatory decision-making process for their making their own healthcare decisions and thus become empowered.

Registered Nurses can employ various strategies to increase a patient’s engagement in their healthcare which will increase empowerment. These strategies include: asking patients
how they like to learn, having many ways of communicating, noticing that the patient has a working system and building on it, participatory decision-making, informing patient’s about potential risks and benefits of their choices, helping patients to clarify feelings and values, investigating what they perceive as a risk, using plain language and word choice.

Additionally, nursing educational programs must incorporate the knowledge and application of health literacy into their curriculums. New graduate nurses must understand their patient’s health literacy, appropriately assess and develop adequate teaching that considers this concept. Continuing educational programs which focus on health literacy must be developed to educate practicing nurses about health literacy and its impact on patient care. Distance learning and web-based programs about health literacy can educate rural practicing nurses. All nurses can educate patients about the critical elements that contribute to their health literacy.

Finally, health literacy education must begin in the K-12 grades focusing on the basic concepts of health and disease. Registered Nurses are instrumental in the development of these K-12th grade health programs. All individuals must have a personal definition of health, and RNs can develop community educational programs that focus on an individual’s development of it. Additionally it would encourage the patient to become an advocate for their health and become an active participant in their healthcare decisions. Registered Nurses can teach rural patients health literacy skills that will encourage their participatory decision making in their healthcare and develop their sense of empowerment.

Some RNs who participated in this study had previously functioned as Licensed Practical Nurses (LPN). This prior nursing education and work experience influenced their interpretation of health literacy and its affect on patient care. These participants did not have exposure to the concept of health literacy and often utilized a form-driven approach to patient care. Continuing
education courses focusing on health literacy are needed for these rural care RNs, and they must be encouraged to obtain a baccalaureate degree in nursing.

Another influencing factor on the RNs’ interpretation of health literacy was their employment experiences in this rural acute care setting and other health care settings. While some participants had worked at several healthcare settings and had a variety of experiences with patients, others had only worked in the one rural acute care setting and had limited experiences with patients. These participants lacked the experiential patient knowledge and viewed health literacy, relationships, participatory decision-making and empowerment as separate concepts instead of connected systems. The disconnection was demonstrated in this study by participants expressing barriers and enabling of participatory decision-making and empowerment as the same. They did not recognize that the difference between barriers and enabling factors.

The educational preparation of the RNs in this study varied, with some having either an associate degree or baccalaureate degree in nursing. Additionally, one participant obtained a diploma in nursing while one had a master’s degree in nursing. The participants’ many levels of nursing educational experiences influenced their interpretation of health literacy. Overall, most of the RNs had not heard of health literacy, and this is most likely is due to the lack of continuing educational courses in health literacy. The participant with a master’s in nursing was familiar with health literacy and understood its connection to patient care. This RN did not express any barriers to participatory decision-making or empowerment. Her additional educational preparation and nursing practice experiences contributed to her connection of health literacy to her patient care.

Often patients are confused and intimidated by the healthcare system and required additional assistance when at home. An Advanced Practice Nurse functioning in the role of
community educator can assist patients during these life-altering events and special healthcare circumstances. This community educator focus is promoting health literacy and can work in conjunction with other healthcare professionals. A Clinical Nurse Leader, also an Advance Practice Nurse, can promote health literacy in patients within the acute care facility. They are instrumental in the assessment and implementation of activities focusing on improving the health literacy of patients. A Clinical Nurse Leader could also develop hospital tools that address health literacy within patient care. Additionally, there is a critical need to integrate current health literacy research into nursing practice.

Health literacy is important in communicating and understanding healthcare information. Additionally, it influences how patients understand wellness and illness, participate in health promotion and health prevention activities, follow treatment regimes and self-care instructions. Registered Nurses have a responsibility to educate all patients to participate in these responsibilities and become expert patients. Registered Nurses are instrumental in teaching patients to become an advocate for themselves in the healthcare system by suggesting that patients keep a written record of how they are feeling, keep personal healthcare records, and prepare before going to a healthcare appointment. Often, patients become nervous in healthcare settings and have difficulty thinking and asking all of their questions. Registered Nurses can talk to patients ahead of the appointment and encourage them to think of their questions before their scheduled appointment. Additional effective communication techniques that RNs can use to help patients during appointments are: pausing during conversation, asking if patients have any questions, and encouraging them to direct the nurse-patient discuss. Patients need presentation skills in order to provide healthcare workers with an understanding of illness onset and their health history. The full impact of the mismatch between individual’s health literacy skills and the
complicated demands of the healthcare system has not been fully assessed. Large numbers of vulnerable or at-risk individuals do not have adequate skills to meet their healthcare related demands they will encounter.

Further nursing research is needed to explore the relationship of health literacy, nursing-patient communication and the internet. This research should focus on using the internet to address promoting the appropriate message to identified individuals at the right time about health literacy. Berkman et al. (2004) recommended that more rigorous studies be performed in order to gain a better understanding of whether inadequate health literacy “is the cause of adverse health outcomes or whether it is simply a marker for low socioeconomic status, poor self-efficacy, low trust in medical providers, or impaired access to care” (p. 89). Several researchers have suggested additional research on the rigorous assessment of health literacy focusing on the collection and analysis of communications in different settings. This should also focus on an individual’s cognitive demands associated with the use of these new assessment tools.

Replication of this phenomenological study is essential in the urban acute care setting in order to determine if the findings of this study are consistent. Additional qualitative and quantitative research studies are needed in rural and urban healthcare settings which explore practicing RNs understanding of health literacy. Future research is also needed to evaluate the nurse-patient relationship in terms of health literacy, participatory decision-making, and empowerment.

The Committee on Health Literacy of the Institute of Medicine stated that “…limited education, training, continuing education, and practice opportunities to develop skills for improving health literacy” (p. 11) and “Increasing knowledge, awareness, and responsiveness to health literacy among health service providers as well as the community would reduce problems
of limited health literacy” (p. 2). Registered Nurses must join all healthcare professionals in making this a common theme we use to share the values of health, to promote participatory decision-making and increase patients’ empowerment.
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APPENDIX A

INFORMATION LETTER TO PARTICIPANTS

Dear Registered Nurse,

I am a registered nurse, and a doctoral candidate in the School of Human Resource education and Workforce Development at Louisiana State University. I am writing you this letter as an invitation to participate in my doctoral dissertation research. As you are probably aware, in the United States health literacy is a healthcare problem facing all health providers. Nursing leaders and national nursing organizations have called for all nurses to provide health care information to individuals at a health literacy level they are able to understand. As a Registered Nurse, you are in a unique position to provide information that may lead to a better understanding of the assessment of a patient’s health literacy.

The purpose of this research study was to explore rural care Registered Nurses’ interpretation of health literacy and its effect on patient care. Therefore, your experiences as a Registered Nurse in a hospital and your personal awareness and assessment of patient’s health literacy are of interest to me as a researcher.

Participation in this study is voluntary and you may withdraw at any time. Although there will be no immediate benefits to your for participating in this study, the findings could contribute to the growing body of knowledge on health literacy in nursing. There are no known risks for participating in the study. Data will be collected through a semi-structured interview conducted at a time and location that is mutually convenient. It is anticipated that the interview will take approximately one hour to complete. The interview process will be confidential. The interview will be audio taped and transcribed, but the transcription will not contain your real name or any identifying information. You will be assigned a fictitious name for transcription and data analysis purposes. All audiotapes and transcriptions will be kept in a locked cabinet in my office until the study is completed, and then they will be destroyed.

A copy of the consent form that you will be asked to sign prior to participation in the study is enclosed for you to review. Please contact me at (985) 549-3371 or (985) 502-7133, to schedule your interview. If you have any questions or concerns about the study please feel free to contact me, or LSU Assistant Professor Dr. Krisanna Machtmes at (225) 578-5748.

The results from this study will be available May 2007. If you would like information about the results, please contact me at one of the above numbers. Thank you for your participation in this study.

Sincerely,

Brenda Matzke, MSN, RN
Doctoral Candidate
Louisiana State University
School of Human Resource Education and Workforce Development
APPENDIX B

PARTICIPANT CONSENT FORM

Title of Study: Rural Care Registered Nurses’ Interpretation of Health Literacy and Its Effect Patient Care

Principle Investigator: Krisanna Machtmes, Ph.D
   Assistant Professor
   LSU School of Human Resource Education and Workforce Development
   Phone: (225) 578-7844
   Email: machtme@lsu.edu

Student Researcher: Brenda Matzke, MSN, RN
   Doctoral Candidate
   LSU School of Human Resource Education and Workforce Development
   Phone: (985) 549-3371 or (985) 502-7133
   Email: bmatzke@lsu.edu

Purpose of Research: The purpose of this qualitative research study is to explore rural care Registered Nurses’ interpretation of health literacy and its effect on patient care.

Risks: It is not anticipated that your will experience any risks for participating in the study.

Benefits: There are no immediate benefits to participating in this study. However, the findings of this study may contribute to the growing body of knowledge on health literacy issues in nursing.

Confidentiality of Responses: The interviews will be conducted only by the student researcher and share with the primary researcher. A fictitious name will be used to ensure your confidentiality in transcription.

Right to Withdraw or Refuse to Participate: Your participation in this study is completely voluntary. You may refuse to participate in the study or withdraw from the study at any time.

Questions or concerns should be addressed to the Principle Investigator, Dr. Krisanna Machtmes at (225) 578-7844 or the Student Researcher, Brenda Matzke at (985) 549-3371 or (985) 898-0556.

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects’ rights or other concerns, I can contact Robert C. Mathews, Chairman, LSU Institutional Review Board, (225) 578-8692. I agree to participate in the study described above and acknowledge the researchers’ obligation to provide me with a copy of this consent form if signed by me.

Signature __________________________________________ Date __________________________
VITA

Brenda R. Matzke began her educational journey by graduating from Tomball High School in 1978. She attended the University of Texas in Austin and graduated in 1981 with a Bachelor of Science degree in nursing. Brenda has practiced as a Registered Nurse for 25 years in a variety of healthcare settings in Texas and Louisiana. These include the operating room, post anesthesia care, surgical, preoperative, endoscopy, medical, telemetry, wound care, and urgent care. She has certifications in basic life support, advanced cardiac life support, and previously as a certified Registered Nurse in the operating room.

Brenda returned to graduate school at Southeastern Louisiana University and graduated with a Master of Science degree in Nursing in May 2003. She joined the faculty of Southeastern Louisiana University School of Nursing in Hammond, Louisiana in August 2003. While teaching nursing full-time and rearing three teenager children, Brenda enrolled in a doctoral program at Louisiana State University in Baton Rouge and graduated with a Doctor of Philosophy degree in May 2007.

Brenda was inducted into Phi Kappa Phi Honor Society in April 2007. She is a member of Sigma Theta Tau International Honor Society of Nursing, American Nurses Association, Tangipahoa District Nurses Association and Southern Nursing Research Society. Brenda currently serves on the nursing evaluation committee and faculty senate at Southeastern Louisiana University. She is active in campus and community life and currently resides in Covington, Louisiana.