JNPD Journal for Nurses in Professional Development • Volume 32, Number 1, 8–14 • Copyright © 2016 Wolters Kluwer Health, Inc. All rights reserved.

Registered Nurses' Experiences With Individuals With Low Health Literacy

CE 2.5 ANCC Contact Hours

A Qualitative Descriptive Study

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The nursing profession is charged to provide effective communication and education to patients. A qualitative descriptive study that explored what nurses experience when interacting with patients thought to possess low health literacy was performed. Findings suggest that nurses are promoting health literacy using several evidence-based strategies. Major barriers encountered by nurses were limited cultural and linguistic resources within their healthcare organizations. This study provides nursing professional development specialists information about the educational gaps of nurses in practice related to health literacy and the identification of systems barriers.

The Institute of Medicine (IOM) reports that 90 million adults lack basic health literacy skills (IOM, 2004). These individuals experience difficulty using everyday health information that is provided by healthcare organizations, media, and communities. Without clear information and understanding of prevention and self-management of conditions, individuals are more apt to miss medical tests and appointments, resulting in higher emergency room utilization and difficulty in managing chronic diseases (Parnell, 2015). Nurses are in a key position to promote understanding of health information. Nurses are charged to provide effective communication and education to their patients. Frontline nurses are challenged daily in meeting their professional and ethical responsibilities as care providers and educators. A qualitative descriptive study that explored what nurses experience when interacting with patients thought to possess low health literacy was performed.

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The authors has disclosed that she has no significant relationship with, or financial interest in any commercial companies pertaining to this article.

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DOI: 10.1097/NND.0000000000000211

LITERATURE REVIEW

The IOM defines 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" (IOM, 2004, p. 32). This concept consists of two components: a capacity within the individual to understand words, phrases, and concepts and the clarity of the health information being communicated. Health literacy is multifaceted. It includes literacy skills, numeracy skills, health knowledge, culture, linguistics, and the demands imposed by the healthcare system (U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, 2010). Therefore, when health professionals assess health literacy of an individual, factors of culture, linguistics, and the complexity of the healthcare system should be considered.

Most of the literature on health literacy has focused on individual factors, with minimal emphasis on the communication skills and practices of healthcare professionals (Parnell, 2015). National healthcare organizations assert that an important responsibility of nurses is to provide and promote health information that is understandable (American Nurses Association & National Nursing Staff Development Organization, 2010; IOM, 2011).

Little is known about what nurses currently experience in the healthcare environment when communicating and teaching patients with low health literacy. Most research has used survey designs when attempting to explain nurses' health literacy knowledge and behaviors (Baldocchi, 2013; Cafiero, 2013; Jukkala, Deupree, & Graham, 2009; Knight, 2011; Macabasco-O'Connell & Fry-Bowers, 2011; Payne, 2009; Schwartzberg, Cowett, VanGeest, & Wolf, 2007). Survey results have shown that there are significant gaps among nurses regarding health literacy knowledge, skills, and practices that address low health literacy (Parnell, 2015). There is a lack of literature that has moved beyond assessing nurses' knowledge of health literacy and has explored working nurses' personal encounters with low health literate patients. One study has looked at undergraduate prelicensure nursing students' stories about their participations with patients with low health literacy (Shieh, Belcher, & Habermann, 2013). This study explores practicing nurses' experiences with patients with low health literacy. By

utilizing a qualitative method, research findings will highlight what issues nurses face in practice when caring for a patient with low health literacy. To address this gap, the research questions for this pilot study were to (a) describe registered nurses' experiences with individuals thought to possess low health literacy, (b) to assess what interventions nurses in practice provide to patients with low health literacy, and (c) to identify potential gaps in practice that may benefit from targeted educational interventions.

METHOD

Study Design

Qualitative descriptive design was chosen by the authors due to a preference to stay close to the data and to provide a rich, undiluted description of the experiences of registered nurses caring for patients with low health literacy (Neergaard, Olesen, Andersen, & Sondergaard, 2009; Polit & Beck, 2012; Sandelowski, 2000).

Sample

Following university institutional review board approval, participants were recruited from a research class at a Northeastern university RN-BSN program during the 2014 fall semester. A convenience sample ($N = 19$) of RN-BSN students was invited to participate in the study during a class. The researcher first informed students about the study, and provided written material detailing the study's, purpose and consent procedure. Students were informed that submission of narratives for the study was voluntary and that the activity would not be graded.

Students were given 30 minutes to write a narrative about a personal experience with someone with low health literacy. To guide writing, students were provided the IOM health literacy definition and asked to recall a situation when they cared for an individual with low health literacy and where they felt they had made a difference by increasing the individual's health literacy. Several written probe questions were provided to students to help encourage thoughts and feelings about the event (see Table 1). Students were instructed not to write their names on their narratives and demographic sheets to ensure anonymity. Students wishing to participate in the study were instructed to place their completed narratives and demographic sheets into a specified box at the end of class. To prevent undue influence on students to participate, the faculty for the course and researcher left the classroom before students turned in their assignments. Sixteen of 19 (84%) students agreed to participate in the study.

TABLE 1 Probe Questions

• Where were you when this took place (setting)?
• What were you doing at the time it took place?
• What were other people doing at the time it took place (if applicable)?
• What emotions did you feel when this event started?
• How did you feel with the final outcome of the event?

Data Analysis

Each hand-written narrative was first typed by the primary author and then assigned an identification number. Content analysis was performed by organizing materials from narratives according to key concepts and themes (Polit & Beck, 2012). To ensure trustworthiness, data were analyzed independently and then validated by the authors. Analysis of data was performed using an iterative four-step approach (Hickey & Kipping, 1996). (a) The researchers worked independently, familiarizing themselves with the responses. During this process, suggestions for themes were formulated, which reflected the major categories emerging from the data. (b) The researchers worked together to identify emerging themes by reexamination of the data. Both researchers reached consensus. (c) The first researcher independently looked at the thematic categories and details, assessing whether any details might fit better into another category and whether details were sufficiently similar for them to be merged, particularly if the details were small. (d) In the final stage, the second researcher checked the decisions made by the first author concerning merging and reallocating themes. Any discrepancies were discussed until both researchers were satisfied with the allocation of responses to the major themes and the merging of details.

FINDINGS

Demographics

Most of the participants were Caucasian, female, and between the ages of 32 and 48 years. Participants were asked if they had previous exposures to the concept of health literacy in past educational programs or work settings. Only 7 of the 16 participants reported prior exposure to health literacy content. Nurses' work settings varied, which included inpatient, outpatient, and surgical settings, across diverse populations of patients. Table 2 summarizes participants' demographics.

Themes

In describing experiences when participants cared for individuals with low health literacy, five themes were identified: building trust, recognizing gaps in learning, barriers, clear communication techniques, and evaluation of learning.

Building trust

Participants often began their stories with a description of the relationship they had with their patients. Several

TABLE 2 Participants Demographics ($N = 16$)

Age in years	
25–26	$n = 2$
32–37	$n = 6$
44–48	$n = 5$
52–54	$n = 3$
Gender	
Female	$n = 14$
Male	$n = 2$
Ethnicity[a]	
Caucasian	$n = 12$
Black	$n = 1$
Latino	$n = 1$
Spanish-Latino	$n = 1$
Brazilian	$n = 1$
Primary language spoken[a]	
English	$n = 13$
Spanish	$n = 1$
Portuguese	$n = 2$
Prior exposure to health literacy content[a]	
Geriatrics	$n = 1$
Long-term care	$n = 2$
Medical-surgical	$n = 2$
Surgical	$n = 1$
Community health	$n = 1$
Maternity	$n = 1$
Labor and delivery	$n = 1$
Telemetry	$n = 1$
Cardiac	$n = 1$
Psychiatry	$n = 2$
Emergency room/Behavioral health	$n = 1$
Not reported	$n = 2$
Prior exposure to health literacy content[a]	
Integrated throughout nursing program	$n = 2$
Nursing education class	$n = 1$
Work	$n = 1$
Nursing school and work	$n = 2$
Continuing education program	$n = 1$
None	$n = 9$

[a]*Self-described.*

participants recognized the need to establish a therapeutic exchange. One participant noted that this took place over time, "I decided to offer nonverbal activities to build trust…a slow alliance started to form." Two participants mentioned that displaying empathy, kindness, patience, and persistence benefitted the nurse–patient interactions, "The patient thanked me for being present and displaying empathy…which facilitated our interactions," and "Using basic acts of kindness, patience, and persistence will benefit the patient and help the assessment process." Another participant highlighted the benefit to the patient by speaking the same language, "She felt comfortable speaking in her own language, she expressed that being able to communicate 1:1 in Spanish without limitations made her feel self-worth." Conversely, this same participant noted her feelings of responsibility related to the relationship, "I was the link chain in her treatment to educate her and make sure she understood." In addition, another participant described the need for a nurse's cultural awareness to promote effective encounters, "I believe when trying to reach this population…we need to first accept their culture and preferences before providing education."

Recognizing gaps in learning

Participants' recognition of gaps in patient understanding occurred most often during an assessment, performing a procedure, or during a communication exchange. During one assessment, a participant noted, "When the patient was readmitted, it gave me a chance to reassess what she understood…we were talking and she said she had Chinese food the night before, and the next day she could not breathe." Another participant commented, "When I asked him if he ever had diabetic education information…he said yes and showed me the resources he had. All were written in English. Turned out even though he spoke English fairly well, he did not read English." Another participant wrote, "She said she did not have any sugar that day so she did not know why it would be so high." A couple participants noticed a knowledge gap when nurses were performing a task, "He asked me what 95 meant, (the number on the pulse ox machine) and I realized that he did not have an

understanding of what the readings meant.'' While checking a patient's blood sugar, nurses noted, "I always ask the patient if they would like to know the result…his reply was—well whatever it is I just take the insulin,'' and another reported "She told me that her blood sugar was low…somewhere around 300.'' Two narratives revealed medication administration as a point of care where lack of understanding was discovered, ''She then asked me what does the insulin do anyway?'' and "As I explained that I was there to give him insulin because his blood sugar was elevated, he started to argue that he did not need it.''

Barriers

Barriers existed at the individual, professional, and system levels. Perceptions of cultural differences appear to be the most prominent barrier to learning and occurred at each level.

Individual factors. At the individual level, participants reported a range of factors beginning with cultural practices and beliefs, ''They (African Americans) will reject food recommendations of the dietician and have family members bring in high fat and salt (soul) food,'' ''Some patients do not believe in American medicine,'' and ''In general there are a lot of myths passed down to new mothers.'' Several participants reflected on the impact of limited resources on patients understanding of their health, "The majority of patients are low income and do not speak or read English… most have little or no formal education,'' "He did not have insurance or primary care,'' and "This patient was going to have difficulty because he lived alone and had limited support.'' Others reflected patient behavior as an obstacle, "The young male patient was difficult to engage and was avoidant of interactions'' and "I could not get my point across that with an improved lifestyle regarding food and exercise…his other comorbidities of diabetes and hypertension may decrease to a point of not needing medication.''

Nurse perspectives. Several narratives revealed that the nurse's perceptions might have contributed to poor patient understanding. One quote reflected that assumptions may have been made, "The nurses assumed that she understood everything…I think we had never explained it to her [patient] before because she had diabetes her whole life.'' One participant may have lacked insight as to how to best communicate the health information, ''The more I tried to explain the correct version of what he 'knew' as right about diabetes, the more agitated he became,'' and one participant may have lacked awareness about their role in promoting patients' health literacy, "Because I work in a place with a population that speaks a different language than myself, I have no real experience to talk about.''

System barriers encountered. Several participants described inadequate organizational resources. One participant noted lack of written Spanish material, "She was unable to read English, and I was unable to provide any written materials in Spanish.'' Another commented on the level of medical jargon in written information given to a patient, "I went on to read the report, and sure enough I thought that a person without a medical background could never understand that report.'' Issues with interpreter services were described, such as lack of interpreters, "They did not speak English, and no translator was available,'' and lack of time when using interpreters, "I feel often rushed in-teaching because the interpreter is being paged.'' And one participant commented on the complexity of the healthcare system, "I told him the steps he needed to follow, and he rarely did so, citing the complexity of navigating the system.''

Clear communication techniques

Participants were not asked specifically to describe interventions used when they felt they had made a difference in their patients' health literacy, but several emerged. Many of the health literacy strategies endorsed in the literature were described by participants.

Written. Two participants cited providing written material that was easily grasped, "We keep our information simple'' and "We have folders that have written information that is easy to understand.'' Several participants mentioned the importance of using pictures, and one participant created a visual chart to promote understanding, "I made a chart that he could have and where he could check off what he had to eat…he could not comprehend the diet without seeing a chart to follow with simple sayings on it.'' Another participant commented on the importance of a low reading level for material, ''Medication education (information) is geared towards the third grade level.'' Only one participant commented on providing material that was linguistically congruent after conducting an assessment, "I contacted the diabetic educator and was able to procure information in Spanish.''

Verbal. Providing health information to individuals using verbal strategies was described. One participant commented, "I was able to explain in terms he understood…having him understand medical speak was a process of taking medical language and translating it into 'car speak' (patient was an auto mechanic).'' Another reported, "Providing concrete simplified instructions helped to reinforce teaching,'' and two participants acknowledged their work experience contributed to effectively communicating, "I have learned not to give too many details because they get more confused,'' and "After many years, I have learned about different cultures …the words that I choose are different now.''

Evaluation of learning

Evaluation of learning as reported by participants was based on limited methods to confirm patient understanding. Several

comments were centered on patient behaviors, "They tend to nod in agreement to everything," "He seemed to understand info," and "At the end of the conversation, she seemed to understand more." Two cited that the patient verbally felt they understood the information, "The patient verbalized understanding to me," and "Ok, now I get it." Only one participant described a clear method for teaching and evaluating learning, "When a CHF patient is admitted, we start teaching and reinforce teaching until they are discharged at which point the material is reviewed again using the teach-back methodology."

DISCUSSION

This pilot study provided insight into the experiences of practicing nurses with health literacy. Limited health literacy has been associated with patients having more mistrust in health providers, skepticism about treatment, and lower satisfaction in quality of care (Paasche-Orlow & Wolf, 2007). Participants' stories often began with the need to develop a respectful and trusting relationship between the nurse and patient. Key strategies used by nurses that enhanced patient dignity and trust included being present, displaying empathy, kindness, patience, and persistence. Nurses who were successful in building a trusting relationship would often elicit important information from the patient that helped improve the plan of care for that individual. Richey (2012) also noted that nurse participants described the importance of nurse expressions of compassion and caring and how these behaviors helped patients to ask health-related questions and to be open to nurses' guidance (Richey, 2012).

A person's health literacy ability is not always easy to estimate. Many patients with low health literacy do not feel comfortable asking questions, and are embarrassed that they cannot read or understand the health information given to them (Parikh, Parker, Nurss, Baker, & Williams, 1996; Parnell, 2015). Participants in the study most often discovered gaps in health understanding when providing patients an opportunity to ask and respond to questions.

Because patients with low health literacy require more help and guidance in their health care, nurses and other professionals may find assisting these populations frustrating (Paasche-Orlow & Wolf, 2007). Nurses' narratives identified certain populations that were particularly challenging when providing health information, such as low income, uninsured, and racial and ethnic minorities. This reflects current populations often identified at risk for low health literacy. In the United States, research demonstrates that the highest risk for low health literacy is found in populations that include advance age, non-White ethnicity except for Asian/Pacific Islanders, and low socioeconomic status (National Center for Education Statistics, 2006). Health literacy and its relationship to culture and language were highlighted in participants' narratives.

Different cultures, languages, beliefs, and values encountered posed challenges for the nurses. In general, participants described limited organizational resources, such as inadequate educational material, limited availability of interpreters for non-English speaking patients, and insufficient time as major barriers in providing effective care to low health literate patients. These findings are similar to other research reporting similar health literacy concerns of multicultural issues (limited English proficiency, interpreter issues, and varying ethnic cultures) and system constraints (Kurashige, 2008).

Comparable to the Shieh et al. (2013) study, which explored prelicensure undergraduate nursing students' experiences in caring for patients with low health literacy, narratives in this study revealed many best practices when promoting health literacy. Nurses' reported simplifying verbal and written information, use of pictures, utilizing "living room" language, limiting key concepts presented, and reinforcing information (Shieh et al., 2013).

Evaluation of patient understanding appears to have been obtained through patient self-report or behavioral cues. However, it cannot be ascertained through the narratives how nurses framed questions to patients when assessing understanding. Some participants appear to have used close-ended questions such as "Do you understand?" based on patient responses. In contrast to Shieh et al.'s (2013) study, only one narrative commented on the use of teach-back or return demonstration.

IMPLICATIONS

Over the past several decades, nursing professional development (NPD) specialists have seen changing expectations for competency and patient safety and the impact of an aging and more culturally diverse population, creating a dynamic practice and learning environment in nursing. Health literacy impacts all areas of nursing practice. Most nursing education programs have not included health literacy in their curricula (Coleman, 2011). The findings from this study support several consistent organizational barriers. NPD specialists should begin with exploring their own institutions' facilitators and barriers to nurses and patients when addressing low health literacy. An educational needs assessment of nursing staff is also recommended. Researchers suggest providing training to health professionals that covers basic health literacy content and techniques to increase health literacy among patients that utilize active learning methods (Kripalani & Weiss, 2006; Lambert et al., 2014). A recent interprofessional consensus study has proposed health literacy educational competencies and practices for health professionals that could guide the NPD specialist with health literacy educational training efforts (Coleman, Hudson, & Maine, 2013).

It is recommended by the Agency for Healthcare Research and Quality (AHRQ) that healthcare professionals

apply a "universal precaution" approach to any patient encountered. This approach encourages nurses to assume that every patient encountered has low health literacy and to teach patients using simple, plain language (AHRQ, 2010). Other recommended strategies to use when providing health education tailored to patients' learning styles and capabilities are providing a shame-free environment, assessing baseline understanding, speaking slowly, limiting teaching to two to three concepts at a time, providing repetition, using visual tools (models, charts, pictures, and pictographs), and providing appropriate written materials aimed at the fifth grade reading level (Kripalani & Weiss, 2006; Parnell, 2015; Speros, 2011).

For evaluation of learning, best practices include asking open-ended questions and use of the teach-back method (Parnell, 2015; Schillinger et al., 2003). The teach-back method validates that a nurse has explained the information in a way a patient can understand. Patient understanding is confirmed when patients can restate the information in their own words. The teach-back process can empower nurses to verify understanding, correct inaccurate information, and reinforce teaching and new skills with patients and caregivers. It is a teaching method that requires a behavior change of the nurse and requires opportunities for practice such as role-play (Fidyk, Ventura, & Green, 2014; Mahramus et al., 2014).

Low health literacy, cultural barriers, and limited English proficiency have been coined as the "triple threat" to effective health communication (Schyve, 2007). Addressing cultural and linguistic challenges is important when addressing health literacy. Several recommendations endorsed in the literature can support nurses when caring for patients who reflect diverse backgrounds and languages. (a) Nurses need to promote cultural self-awareness by assessing for cultural and linguistic assumptions and biases. (b) Nurses need to routinely assess and document patients' linguistic abilities, language assistance needs, and cultural beliefs. (c) Nurses need to be involved in creating patient education that is culturally and linguistically relevant for the most common populations they encounter. (d) Nurses should advocate for trained medical interpreters that utilize endorsed health literacy strategies such as; plain language and teach-back method (AHQR, 2010; Parnell, 2015; Singleton & Krause, 2009). Recommendations for future research are merited to assess health literacy and cultural training needs of nurses in the workplace. To extend the research of this study, a sample with a different population of nurses and use of focus groups is suggested.

LIMITATIONS

Limitations of this study are associated with a basic qualitative design. The analytical process is somewhat subjective as descriptions depend on the researchers' perceptions and inclinations (Neergaard et al., 2009). The analysis procedures attempted to minimize possible subjectivity by having researchers analyze the data independently and then validate as a team. Generalizability of findings is limited due to small sample size and use of a convenience sample (Grove, Burns, & Gray, 2013). The potential for social desirability response bias could have been introduced as the study was conducted in the classroom with faculty and researcher present (Polit & Beck, 2012). The narratives were conducted after the experiences occurred and may be misremembered (Maithreyi & Surapaneni, 2010).

CONCLUSION

This study adds to what is known about nurses' interactions with patients with low literacy through written narratives about the nurses' experiences in practice. These narratives occurred in many settings and with diverse patient populations. Nurses encountered cultural, language, and organizational barriers within the healthcare system that employs them when trying to address health literacy issues with patients. Most of the narratives reveal nurses' awareness of their professional and ethical responsibilities to provide health information that is understandable to their patients. Despite nurses' limited formal education about health literacy, many nurses were using strategies that are considered best practices for mitigating the effects of low health literacy. This study provides NPD specialists information about the potential educational needs of nurses in practice related to health literacy and identification of possible systems barriers.

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