Journal of Transcultural Nursing
2018, Vol. 29(1) 6–13

DOI: 10.1177/1043659617704046
journals.sagepub.com/home/tcn
SAGE

Perceptions of Nursing in Appalachia: A State of the Science Paper

Evelyn P. Brewer, PhD(c), MSN, RN[1]

Abstract

Introduction: Nursing practice is continuously evolving in response to global health care need, sociopolitical culture, and advancing medical knowledge necessitating ongoing evaluation of professional practice. The purpose of this state of this science paper was to explore current perceptions of nursing and critique the depth of knowledge specific to nursing practice in the Appalachian region. **Methodology:** A review of the literature in multiple databases was conducted to explore perceptions of nursing in Appalachia. **Results:** Categories of perception included the following: (a) perceptions of nurses and education leaders that practice in the Appalachian region, (b) perceptions of communities of Appalachia and Appalachian health care systems, and (c) perceptions of patients possessing inherent cultural characteristics of the Appalachian region. **Discussion:** None of the literature specifically addressed perceptions of nursing. Much of the available literature was over 5 years old. A significant deficiency in understanding perceptions of nursing in Appalachia was identified.

Keywords

nurse, nursing, Appalachia, Appalachian, nursing practice

As a professional practice, nursing is responsive to change in global sociopolitical factors, advancing medical knowledge, and health care needs of the clients. Generically, nursing focuses on health promotion, healing, and alleviation of suffering. However, these generic, widely accepted descriptions fail to identify characteristics specific to many areas of professional nursing practice. It is essential to understand factors influencing nursing practice as a central element of support for professional practice. While nursing has long focused on the need for cultural competence in patient care delivery, there has been less interest in discovering how factors affect the practice of professional nurses as culturally diverse individuals. Much of the existing work has focused on culturally distinct nursing populations such as English-as-a-second-language nurses or foreign nurses who come to the United States to practice. However, select regions of the United States provide the setting for nursing care that is diverse but not culturally distinct from mainstream of the United States. Appalachia is classified as such (Rosswurm, Dent, Armstrong-Persily, Woodburn, & Davis, 1996).

The term "Appalachia" has many definitions and may include cultural, geographical, or political concepts to define a very large, very diverse region. In 2009, the Appalachian Regional Commission (ARC) revised the classification of the region into subregions to aid with analysis of economic and infrastructure systems (ARC, n.d.). The Central and South Central subregions contain Western North Carolina, Eastern Tennessee, Southwestern West Virginia, Western Virginia, and Eastern Kentucky and provide the focus of interest for this article. Defining the regional links is important as attempts to define Appalachia commonly try to link inhabitants and the place (Keefe, 2005). The intensity of "Appalachian" cultural characteristics varies from a strong intensity inside the regional core to less intense on the periphery (Williams, 2002). This variation is relevant, serving as an influence for Appalachian cultural traits not exclusively unique but varying in degree of importance and congruence with the nation as a whole.

One variation is in health care availability, beliefs, practices, and delivery. Health care in Appalachia often takes shape as one in which the health care professional functions as a guide for health care decisions, prompting expression of patient values, attempting to understand patient values, all the while commenting, and sometimes criticizing, values and behaviors in an attempt to stimulate change toward a more healthy lifestyle (Tong, 2007). Early images of nursing care in Appalachia came from a focus on the "granny midwife" central to women's health or herbalists and lay healers common in the early 20th century who filled a need in the Appalachian communities with few medically educated professionals (Barney, 2000; Cavender, 2003). Later, historical writings focused on exemplary nursing figures influential in

[1]East Tennessee State University, Johnson City, TN, USA

Corresponding Author:
Evelyn P. Brewer, PhD(c), MSN, RN, 4040 Little Laurel Road, Creston, NC 20615, USA.
Email: empbrewer@yahoo.com

delivering care within the region such as Mary Breckinridge, the founder of the Frontier Nursing Service, who was educated in the United States and Europe but had family ties to the Appalachian region where she eventually came to practice nursing (Goan, 2008). Works by nursing figures like Breckinridge brought the science of nursing and professional practice to the Appalachian region (Ruffing-Rahal, 1991). Perceptions of nursing in Appalachia were transitioning from a backwoods, layperson using resources at hand to an educated, trained professional capable of integrating scientific strategies and methods during the delivery of health care.

While perceptions of nursing are evident in the historical context, perceptions of nursing today in Appalachia are obscure. The purpose of this article is to discuss perceptions of nursing and critique the depth of knowledge specific to nursing practice in the Appalachian region. The literature reveals three natural categorizations of the perceptions of nursing: (a) perceptions of nursing held by nurses within the region, (b) perceptions of nursing found in communities and community structures within the region, and (c) perceptions of nursing as perceived by patients within the region.

Method

Theoretical Concepts

The rural nursing theory is a descriptive, middle range nursing theory, concentrating on the limited perspective of nursing specific to rural areas (Winters, 2013). The theory proposes commonalities of nursing practice in rural regions and differentiates aspects of this nursing practice from that of an urban region. Almost half (42%) of Appalachian region is designated as rural (ARC, n.d.), making the rural nursing theory a good fit as a framework for exploring nursing practice in the region.

Literature Review

To obtain the widest collection of literature, the literature search had no date limitation. Inclusion of older literature added depth to the historic perceptional evolution and supported holistic comprehensive critique of all the available literature. The abstracts served as the field of search based on the recommended use of an abstract by American Psychological Association guidelines (VandenBos, 2010).

Generic search terms ensured capture of all articles relevant to the topic. The initial search terms "perceptions," "nursing," and "Appalachia" produced one article, resulting in a widening of search parameters. The limiting search term was identified to be "perceptions." Subsequent searches dropped this term from the search effort. The final search terms used included "nurse" or "nursing" and "Appalachia" or "Appalachian" under the abstract heading. All possible combinations of the search terms produced a significant number of duplications. Databases searched were the following: Cumulative Index to Nursing and Allied Health Literature, PubMed, ProQuest Dissertations and Theses, ETSU Digital Commons, and Ovid. The search produced 72 items after elimination of duplications. Detailed examination using the inclusion and exclusion criteria reduced the list to 26 items.

Inclusion Criteria

Only dissertations, theses, and peer-reviewed published articles reporting primary data were included in the review. Articles were included if they portrayed the nurse as a culturally competent, practicing professional in the Appalachian region (i.e., "the nurse did . . . ") and if consideration of Appalachian cultural characteristics formed a central focus of nursing practice.

Exclusion Criteria

Nonpeer-reviewed works, works without academic review processes, and articles describing use of secondary data were excluded. Portrayal of the nurse as a theoretical figure providing standardized nursing care also was grounds for exclusion (i.e., "the nurse should . . . " or "the nurse could . . . "). Lack of discussion addressing cultural perspectives was an additional exclusionary factor.

Findings

The literature revealed no direct measurement of or statements about perceptions of nursing in Appalachia; therefore, inference was the method used to categorize the literature. The findings are organized according the perceptions of nursing: (a) perceptions of nursing by the nursing and education leaders that practice in the Appalachian region, (b) perceptions of nursing by the communities of Appalachia and Appalachian health care systems, and (c) perceptions of nursing by Appalachian patients possessing inherent cultural characteristics of the region. The three categories may also be linked to the rural nursing theory concept of "The Professional Nurse" (H. J. Lee & Winters, 2004; Winters, 2013) as illustrated in Table 1.

Perceptions of Nursing by Nurses and Education Leaders

In this category, there are three subcategories identified: (a) Disparity in educational preparation,(b) Advanced education and advance practice, and (c) Nursing leadership. Four articles focused on perceptions of disparity and the additional challenge of becoming a nurse, two on perceptions of advanced education, and three examine leadership.

Disparity in Educational Preparation. Appalachia is a region of educational disparity. A contributing factor is widespread poverty with little extraneous financing for advanced education. Although the poverty rate has fallen from 31% in 1960

Table 1. Categorizations of Perceptions of Nursing as Aligned With Rural Nursing Theory Concept of "The Professional Nurse."

Theoretical dimension	Perspective of nursing and sources in the literature
Community expectation and responsibility	Perceptions by nurses and education leaders
• Generalist role with specialist skill • Multiple community roles	Baker (1997) Blowers, Ramsey, Merriman, and Grooms (2003)
• Role diffusion	Caldwell (2007) Ferguson (2005) M. L. Lee, Hayes, McConnell, and Henry (2013) Macavoy and Lippman (2001) McClung (2008) Persily (2004) Ramsey, Blowers, Merriman, Glenn, and Terry (2000)
Interrelationships	Perceptions by communities and health care systems
• Lack of anonymity and separation	Denham (2003)
• Client familiarity and advocacy	Fletcher, Slusher, and Hauser-Whitaker (2006) Florence, Goodrow, Wachs, Grover, and Olive (2007) Huttlinger, Schaller-Ayers, Kenny, and Ayers (2004) Jessee and Rutledge (2012) McDaniel and Strauss (2006) Plattner (1987) Snyder and Thatcher (2014)
Nurse–client interactions	Perceptions by patients
• Caring concepts and practices	Gobble (2009)
• Provider culture	Hunsucker, Frank, and Flannery (1999) Lohri-Posey (2006) Lowry and Conco (2002) Mixer, Fornehed, Varney, and Lindley (2014) Parnicza (1990) Presley (2013) Schlomann, Virgin, Schmitke, and Patros (2011) Wallace, Tuck, Boland, and Witucki (2002)

Note. Concepts and theoretical dimensions are further discussed in H. J. Lee and Winters (2004).

to 17% during the period from 2009 to 2013, this decrease reflects a transition from an area of widespread poverty to one of economic contrast within the region, not widespread strong economic growth (ARC, n.d.). Nationally, 70% of students attend college; yet in Appalachia that rate is only around 50% with much lower rates in some areas (ARC, 2012). This financial disparity contributes to a significant employment requirement during nursing school with decreased time to devote to academics and heavy dependence on financial aid funding with resultant substantial payback obligations (Behringer & Friedell, 2006; Purnell, 1999). Additional contributing factors include a lack of emphasis and support for higher education (Behringer & Friedell, 2006; Purnell, 1999), increased likelihood of deficient specialized care competence (Behringer & Friedell, 2006), and education (Baker 1997). Finally, cultural differences may be subtle, relatively unnoticeable, and, therefore, more challenging to teach and learn (Williams, 2002) for all nursing students.

Strategies to meet this educational disparity included peer tutoring programs for students who were struggling academically (Blowers et al., 2003; Ramsey et al., 2000), immersion experiences alongside culturally competent nursing professionals (Macavoy & Lippman, 2001), and independent ownership of professional competency in the face of insufficient formal support structures (Baker, 1997). Although academic challenge was an identified perception of nursing education, these strategies proved efficacious in meeting this challenge.

Advanced Education and Advanced Practice. The literature revealed difficulty in separating nursing perceptions and Appalachian cultural characteristics. Caldwell's (2007) heuristic phenomenological study explored the life stories of eight nurse practitioners born in Appalachia and working at the master's level of advanced practice nursing. Although advanced education modified their viewpoint of cultural patterns such as acceptance of cigarette smoking, alcoholism, and religious practices, it did not minimize the strength of the inherent cultural values and traits (Caldwell, 2007).

Ferguson (2005) examined the impact of cultural norms and nursing practice through a focus on the availability and use of information technology. As a region of health care provider shortage (Behringer & Friedell, 2006) in which web-based technology could serve as an effective vehicle for connection and communication, Ferguson's findings did not support this viewpoint. The lack of computer literacy and technology infrastructure posed no barrier to use; rather, the attitudes about use posed a greater barrier (Ferguson, 2005). Little use of telemedicine and the preference for face-to-face continuing education opportunities seemed to be participant personal choice. Appalachian culture holds the establishment of personal relationships essential to the development of trust and connection (Presley, 2013). Professional isolation (National Advisory Committee on Rural Health and Human Services, 2015) and independence (Russ, 2010) are expected norms in Appalachia. It is possible that neither telemedicine nor online continuing education opportunities fit the model of independence or support for development of personal relationships deemed vital to cultural norms and, therefore, use was negatively affected.

Nursing Leadership. There is a distinct perception of nurses as leaders in Appalachia by nurses in the region. In Appalachia's

patriarchal social structure, men have customarily been the family provider through traditional male roles demanding physical strength such as hunting and farming (Denham, 2003). However, McClung (2008) found leadership roles in men who stepped out of the expected norms to become nurses. M. L. Lee et al. (2013) found, even as students, nurses were leaders in interprofessional collaboration in a service-learning project aiding a vulnerable population of low-income, chronically ill elderly females.

Leadership is also noted in Persily's (2004) exemplar of professional practice. As an experienced perinatal advanced practice nurse, the author identified an absence of prenatal care and became instrumental in filling that gap. Clients began using the clinic for prenatal care, but they brought their families in for care as well (Persily, 2004), supporting the union of family members into a single unit of care consistent with the cultural norms (Denham, 1999; Denham, Meyer, Toborg, & Mande, 2004). This practice reflects the establishment of trust relationships with health care providers and a means of meeting health care needs in a region of health care shortage (Behringer & Friedell, 2006). As strong as the impact was on care delivery for her patients, greater still was the impact on regional health care. As a preceptor of multidisciplinary students, the author integrated interdisciplinary practice and provided an avenue of interest for these future care providers, some of whom chose to stay in the region to practice (Persily, 2004).

Perceptions of Nursing in Appalachian Communities

Pertinent literature in this category was further condensed into two subcategories: (a) Nurses as advocates and (b) Nurses as members of the Appalachian culture. Eight articles are included. Five articles focus on perceptions of community advocacy and three examine influences of cultural norms on within the community.

Nurses as Advocates. Three of the five articles support the idea of nurses as community advocates through their ability to bring health care to disparate Appalachian regions. McDaniel and Strauss (2006) and Snyder and Thatcher (2014) identified outcomes for mobile health units committed to communities for an extended period of time. Huttlinger et al. (2004) worked to bring health care to the community for a more limited time.

Sister Bernie came to Southwest Virginia as part of a three-member team in response to the region's association with the poorest health statistics in the state for 1978 (Snyder & Thatcher, 2014). At that time, the county had no hospital, only one clinic, and rural mountainous terrain—all factors that negatively affected health care access. Sister Bernie used her small personal vehicle that became a roving health wagon supported by charitable donations (Snyder & Thatcher, 2014). McDaniel and Strauss (2006) describe development of an outreach mobile health clinic staffed by nursing students which provided health services to underserved populations and professional, culturally competent health care education for students. Huttlinger et al. (2004) also support the idea that nurses were effective Appalachian community advocates through their work to bring rural area medical clinics to the area and to fill in a gap of knowledge about rural area medical attendees. Data collected informed political and health care leaders and advocated for measures to meet health care needs (Huttlinger et al., 2004).

Fletcher et al. (2006) described nursing/community leader collaboration to increase health care access but expanded the role of nursing to include case management, health education, and to a significant level of political service as the president of the board of trustees for a health clinic that served nine rural counties in Appalachian Kentucky. Jessee and Rutledge (2012) presented Appalachian nurses as community advocates through a quantitative study focusing on diabetes self-management education. The Appalachian region has an excessively high rate of diabetes at 12.5% as compared with the national rate of 8.6% (Denham, Wood, & Remsberg, 2010). However, self-sufficiency and pride in independence prevalent in the Appalachian culture (Marek, Brock, & Sullivan, 2006) support the theory of diabetes self-management (Denham, Remsberg, & Wood, 2010) for Appalachians. Jessee and Rutledge (2012) found participants who took part in the diabetes self-management intervention had improvements in blood glucose levels, A1C levels, and self-management over control group participants. As a community effort, perceptions of culturally sensitive nursing advocacy for successful diabetes self-management would positively affect health throughout the community.

Nurses as Members of the Appalachian Culture. Nurses in Appalachia are also members of the Appalachian community. Denham (2003) examined health care workers' preparation to assess pregnant women for physical and emotional abuse. Appalachian characteristics (poverty, patriarchal viewpoint, geographic isolation, and limited or inconsistent legal enforcement or protection) identify the region as an area of need specific to abuse (Denham, 2003). Denham (2003) identified self-held perceptions by nurses of insufficient education to assess abuse or make appropriate referrals in abuse situations as well as unfamiliarity with workplace policies about abuse. Additional findings suggested potential cultural norms about abuse might predispose nurses to inadequately assess or report abuse situations in the region, because, of the health care workers, 17.6% reported sexual abuse as a child and 9.9% reported violent treatment as a child (Denham, 2003).

Florence et al. (2007) examined the impact of a 3-year interdisciplinary educational program focusing on practice in rural underserved Appalachian communities. The authors found that participants were significantly more interested in working in primary care or rural community settings (p =

.009), with underserved populations ($p = .025$) using interdisciplinary collaboration ($p < .001$) if they had participated in the rural practice program (Florence et al., 2007). These results suggest that exposure to factors inherent to regional characteristics during formal education provided students an opportunity to develop the strategies to successfully manage perceived barriers of practice in Appalachian communities.

Finally, Plattner (1987) recounts the historic efforts of the Sisters of Divine Providence during the early 1900s in Appalachian communities during a major outbreak of influenza. A sense of distrust for the nuns as nurses existed in the region yet they overcame distrust, focusing on healing, not religious differences (Plattner, 1987). The nuns were careful to not interfere with traditional mountain health care customs and were diligent to avoid criticizing cultural norms. These actions stimulated mutual acceptance of health care practices and successful integration as part of an Appalachian community.

Perceptions of Nurses by Patients in Appalachia

Another category identified in the literature presents perceptions of nurses through the perspectives of Appalachian patients. Nine studies were appropriate for this category. Eight described nurses as trusted professionals and significant sources of support. Results from the ninth study by Parnicza (1990) were slightly different.

Parnicza's (1990) phenomenological study explored interactions between Appalachian care givers and social support systems. Parnicza found that, although the nurses served as an essential link to keeping family members at home and were major sources of social support, caregiver participants did not identify nurses as a source of emotional support. Research has demonstrated an inherent hesitance of Appalachian residents to accept strangers and that, in times of need, the first expectation of assistance is from family and church members (Marek et al., 2006; Russ, 2010).

Each of the other eight studies illustrated perceptions of nurses in Appalachia as trusted providers and a source of strong personal relationships. Hunsucker et al. (1999) compared perceptions of need for families of critically ill hospitalized patients in rural Appalachia and in large metropolitan settings. An unexpected finding recognized the intensive care nurses in the role of gatekeeper. Appalachian cultural norms support hesitation to accept outsiders (Marek et al., 2006). Patient families refused interviews when the investigator asked but accepted when the unit nurses asked them to participate (Hunsucker et al., 1999) making the nurse a "gatekeeper," a trusted professional, and a significant source of support.

Patient perspectives of nursing portray nurses as competent, accepted professionals in four studies. An ethnographic study of patients living with hypertension identified previous negative patient experiences stemming from perceptions of a lack of respect for the patient as a person, feeling devalued, and alienation by health care providers (Schlomann et al., 2011). This dysfunctional environment may also reflect the cultural norm for a dislike of authority figures and attempts to control behaviors (Pike Community Hospital, 2010; Presley, 2013; Purnell, 1999). Conversely, experiences at the nurse-run clinic were positive and clients expressed satisfaction and personal validation in health care interactions (Schlomann et al., 2011). Nursing professionals provided needed services in a manner that supported dignity and self-worth, concepts especially important in the Appalachian culture where social equality and respect are valued (Marek et al., 2006).

A similar phenomenological study explored the lived experience of being a diabetic in rural Appalachia (Lohri-Posey, 2006). Participants identified the significant role of nurses in patient education although they were secondary sources of information with primary sources being family members or friends, a finding supported by previous research (Behringer & Friedell, 2006). Consistent with the cultural characteristics of the region, the unit for treatment was the family, not the individual patient (Denham, 1999; Denham et al., 2004). Participant quotes reflected the significance of family behaviors and understanding in diabetes management. For the nurses caring for these patients, recognition of the family structure was imperative to meeting client need (Lohri-Posey, 2006). This sense of family—and inclusion of the nurses as theoretical family members—minimized the viewpoint of the health care provider as an outsider. Nurses viewed as knowledgeable, nonjudgmental, and respectful were valued.

Two studies examined culturally competent care. Mixer et al. (2014) identified the value of integrating folk and biomedical therapies during end-of-life care. Presley (2013) proposed specific culturally appropriate approaches for nursing students based on specific cultural traits of the region including the expectation of discussion on common topics ranging from general comments on the weather to more intimate disclosure about potential connections based on shared personal or family residence locations. Research has demonstrated direct linkage between personal identity and community and kinship group identities in Appalachia (Russ, 2010). This communication technique supported perceptions that patients want to be seen as individuals who share common bonds with providers, not as a medical diagnosis or a stranger with an ailment. Additionally, nurses in the study served as a trusted instrument in the continuum of care in areas of more complex expert consultation (Mixer et al., 2014), a bridge between residents hesitant to consider acceptance from other culturally diverse health care providers (Presley, 2013).

Perceptions of the significance of nurses in spiritual support are also evident in the literature. Lowry and Conco (2002) explored spirituality with a population of aging adults in Appalachia in a phenomenological study. Most participants supported a framework for spiritual care provision to include reverence, kind treatment, listening, thoughtfulness,

kindheartedness, and responsiveness supporting a perception of spirituality not communicated as a statement but as a demonstration. Participants described spirituality as an inherent trait for nurses, not a skill learned in school, but a naturally occurring characteristic consistent with cultural norms (Goins, Spencer, & Williams, 2011). Patients categorized nurses as either spiritual or nonspiritual based on their caring attitudes, sensitivity, and trustworthiness or the lack thereof (Lowry & Conco, 2002).

Wallace et al.'s (2002) ethnographic study described client perceptions of parish nursing in two churches in an Appalachian community. Members of the churches viewed parish nurses as approachable, friends, counselors, and sources of support. Cultural norms dictate family, friends, and the church as primary sources of assistance (Rosswurm et al., 1996). Integration of physical and spiritual health for the congregation and other community members supported the cultural characteristics emphasizing the collective community focus (Russ, 2010). A deep intimate personal relationship between the congregation members and the nurse developed (Wallace et al., 2002) supporting the significance of loyalty to family, church, and community (Behringer & Friedell, 2006; Pike Community Hospital, 2010).

Gobble (2009) used the story theory method to describe a developing relationship between a nursing professional and a patient steeped in Appalachian heritage and religious traditions. Reliance on faith health healing as personified and practiced by her mother strongly influenced the patient's health care decision. Faith and faith healing are essential cultural norms in the Appalachian culture (Behringer & Friedell, 2006; Deskins et al., 2006; Shell & Tudiver, 2004). Even understanding the biomedical model of care, compliance seemed contradictory to the strong belief in God as the source of all healing—a viewpoint that the nurse practitioner did not share but accepted nonjudgmentally (Gobble, 2009). Appalachian cultural characteristics value communication techniques that are accepting, nonjudgmental, nonconfrontational, and sensitive (Russ, 2010). Through listening, active engagement in cultural knowledge acquisition, and open-minded care, the nurse practitioner was able to provide culturally sensitive care (Gobble, 2009). Evaluation of the literature supported an inference of communication channels between the two that were solid, comfortable, and mutually respectful although not in total agreement or with complete understanding of the sometimes conflicting perspectives. The patient found a sense of safety and acceptance not only for who she was but for the spiritual views so inherent to her belief system.

Discussion

The literature supports perceptions of nursing from the perspective of nursing and education leaders in Appalachia, of communities of Appalachia and Appalachian health care systems, and of Appalachian patients having innate cultural characteristics of the region. Although educational and organizational disparities exist, the literature demonstrates that Appalachian nurses efficiently found ways to provide effective, proficient care. However, the literature does not reveal how nursing educators can most successfully support prelicensure and postlicensure nursing educational success, how nurses develop specialty skills without specialized training, or how this challenging academic preparation affects later decisions to pursue advanced nursing practice.

Communities recognize nurses as advocates and trusted members of local social structures who provide holistic care with empathy, cultural competence, and professionalism. Native-born nursing Appalachians may use unrecognized personal cultural traits to support successful practice and incorporate advanced practice with cultural norms. Yet it is unknown if cultural training specific to Appalachia would positively advance the professional skills of native Appalachian nurses as in Denham's (2003) study on abuse. Nurses are seen as determined, willing to work, able to overcome, and willing to assume positions as leaders in the profession, the community, and the region. Still it is unknown how Appalachian cultural characteristics, like independence and determination, influence professional behaviors in practice or how the Appalachian cultural norms may, in fact, be barriers to improved professional practice. Finally, it is unclear how nonnative Appalachian nurses become culturally competent practicing members of the communities. The literature supports theories of restrain and persistence, community involvement, and education of the community and nurses. Nonetheless, it is unclear what this process of community integration looks like, how a nurse becomes a trusted professional, and how academic preparation can support that integration for all nurses in the Appalachian region.

This state of the science paper identified and categorized perceptions of nursing in Appalachia through inference based on current literature on the topic. There was no literature specifically addressing perceptions of what nursing is in Appalachia—a large gap in nursing knowledge. There was a dearth of literature about nursing practice specific to Appalachia and no method for direct measurement or conceptualization of nursing in the region. Much of the available literature is over 5 years old indicating a significant lack of understanding and growth in perceptions of nursing in Appalachia. However, through simultaneous examination and comparison of literature on nursing in the Appalachian region and literature about regional Appalachian characteristics, perceptions of nursing emerged. Additional research is needed to identify perspectives of nursing specific to Appalachia for the purpose of supporting professional practice in an ever changing health care community.

Author's Note

The information in this article was prepared as partial completion of an unpublished comprehensive exam process in a doctoral program at East Tennessee State University.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

Appalachian Regional Commission. (n.d.). *The Appalachian region*. Retrieved from http://www.arc.gov/appalachian_region/TheAppalachianRegion.asp

Appalachian Regional Commission. (2012). *Appalachian higher education initiative planning workshop summary: Increasing postsecondary education attainment—The "game changer" for Appalachia*. Retrieved from http://www.arc.gov/noindex/programs/education/AHEJuly2012PlanningWorkshopSummary.pdf

Baker, B. A. (1997). *Use of American Diabetic Association's national standards for diabetes self-management education programs among clinics in Kentucky* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 9807874)

Barney, S. L. (2000). *Authorized to heal: Gender, class, and the transformation of medicine in Appalachia, 1880-1930*. Chapel Hill: University of North Carolina Press.

Behringer, B., & Friedell, G. H. (2006). Appalachia: Where place matters in health. *Preventing Chronic Disease: Public Health, Practice, and Policy*, *3*(4), 1-4. Retrieved from http://www.cdc.gov/pcd/issues/2006/oct/06_0067.htm

Blowers, S., Ramsey, P., Merriman, C., & Grooms, J. (2003). Patterns of peer tutoring in nursing. *Journal of Nursing Education*, *42*, 204-211. doi:10.3928/0148-4834-20030501-06

Caldwell, D. R. (2007). Bloodroot: Life stories of nurse practitioners in rural Appalachia. *Journal of Holistic Nursing*, *25*, 73-79. doi:10.1177/0898010106293610

Cavender, A. (2003). *Folk medicine in Southern Appalachia*. Chapel Hill: University of North Carolina Press.

Denham, S. A. (1999). Part I: The definition and practice of family health. *Journal of Family Nursing*, *5*, 133-159. doi:10.1177/107484079900500203

Denham, S. A. (2003). Describing abuse of pregnant women and their healthcare workers in rural Appalachia. *American Journal of Maternal/Child Nursing*, *28*, 264-269.

Denham, S. A., Meyer, M. G., Toborg, M. A., & Mande, M. J. (2004). Providing health education to Appalachian populations. *Holistic Nursing Practice*, *18*, 293-301.

Denham, S. A., Remsberg, K., & Wood, L. (2010). Diabetes education in the Appalachian region: Providers' views. *Rural and Remote Health*, *10*, 1321. Retrieved from http://www.rrh.org.au/publishedarticles/article_print_1321.pdf

Denham, S. A., Wood, L. E., & Remsberg, K. (2010). Diabetes care: Provider disparities in the US Appalachian region. *Rural and Remote Health*, *10*, 1320. Retrieved from http://www.rrh.org.au/publishedarticles/article_print_1320.pdf

Deskins, S., Harris, C. V., Bradlyn, A. S., Cottrell, L., Coffman, J. W., Olexa, J., & Neal, W. (2006). Preventative care in Appalachia: Use of the theory of planned behavior to identify barriers to participation in cholesterol screenings among West Virginians. *Journal of Rural Health*, *22*, 367-374. doi:10.1111/j.1748-0361.2006.00060.x

Ferguson, K. P. (2005). *Impact of technology on rural Appalachian health care providers: Assessment of technological infrastructure, behaviors, and attitudes* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3195370)

Fletcher, C. W., Slusher, I. L, & Hauser-Whitaker, M. (2006). Meeting the health care needs of medically underserved, uninsured, and underinsured Appalachians. *The Kentucky Nurse*, *5*(4), 8-9. Retrieved from http://www.kentucky-nurses.org/Homepage-Category/Publications/The-Kentucky-Nurse

Florence, J. A., Goodrow, B., Wachs, J., Grover, S., & Olive, K. E. (2007). Rural health professions education at East Tennessee State University: Survey of graduates from the first decade of the Community Partnership Program. *Journal of Rural Health*, *23*, 77-83. doi:10.1111/j.1748-0361.2006.00071.x

Goan, M. B. (2008). *Mary Breckinridge: The Frontier Nursing Service and rural health in Appalachia*. Chapel Hill: University of North Carolina Press.

Gobble, C. D. (2009). The value of story theory in providing culturally sensitive advanced practice nursing in rural Appalachia. *Online Journal of Rural Nursing and Health Care*, *9*(1), 94-105.

Goins, R. T., Spencer, S. M., & Williams, K. (2011). Lay meanings of health among rural older adults in Appalachia. *Journal of Rural Health*, *27*, 13-20. doi:10.1111/j.1748-0361.2

Hunsucker, S. C., Frank, D. I., & Flannery, J. (1999). Meeting the needs of rural families during critical illness: The APN's role. *Dimensions of Critical Care Nursing*, *18*(3), 26-32.

Huttlinger, K., Schaller-Ayers, J. M., Kenny, S. B., & Ayers, J. W. (2004). Research and collaboration in rural community health. *Online Journal of Rural Nursing and Health Care*, *4*(1), 22-36.

Jessee, B. T., & Rutledge, C. M. (2012). Effectiveness of nurse practitioner coordinated team group visits for type 2 diabetes in medically underserved Appalachia. *Journal of the American Academy of Nurse Practitioners*, *24*, 735-743. doi:10.1111/j.1745-7599.2012.00764.x

Keefe, S. E. (Ed.). (2005). *Appalachian cultural competency*. Knoxville: University of Tennessee Press.

Lee, H. J., & Winters, C. A. (2004). Testing rural nursing theory: Perceptions and needs of service providers. *Online Journal of Rural Nursing and Health Care*, *4*(1), 51-63.

Lee, M. L., Hayes, P. A., McConnell, P., & Henry, R. M. (2013). Students delivering health care to a vulnerable Appalachian population through interprofessional service-learning. *Gerontology & Geriatrics Education*, *34*, 45-59. doi:10.1080/02701960.2013.737388

Lohri-Posey, B. (2006). Middle-aged Appalachians living with diabetes mellitus: A family affair. *Family and Community Health*, *29*, 214-220.

Lowry, L. W., & Conco, D. (2002). Exploring the meaning of spirituality with aging adults in Appalachia. *Journal of Holistic Nursing*, *20*, 388-402. doi:10.1177/089801002237594

Macavoy, S., & Lippman, D. T. (2001). Teaching culturally competent care: Nursing students experience rural Appalachia. *Journal of Transcultural Nursing*, *12*, 221-227. doi:10.1177/104365960101200306

Marek, L. I., Brock, D. J. P., & Sullivan, R. (2006). Cultural adaptations to a family life skills program: Implementation in rural Appalachia. *Journal of Primary Prevention*, *27*, 113-133. doi:10.1007/s10935-005-0017-5

McClung, M. W. (2008). *Appalachian men and their choice of nursing as a career* (Master's thesis). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 1450301)

McDaniel, J., & Strauss, S. (2006). Development of a nurse practice arrangement in rural Appalachia: Triumphs and challenges. *Nursing Education Perspectives*, *27*, 302-307.

Mixer, S. J., Fornehed, M. L., Varney, J., & Lindley, L. (2014). Culturally congruent end-of-life care for rural Appalachian people and their families. *Journal of Hospice & Palliative Nursing*, *16*, 526-535. doi:10.1097/NJH.0000000000000114

National Advisory Committee on Rural Health and Human Services. (2015, March). *Telehealth in rural America* (Policy Brief). Retrieved from http://www.hrsa.gov/advisorycommittees/rural/publications/telehealthmarch2015.pdf

Parnicza, D. R. (1990). *Analysis of rural Appalachian caregivers' use of social support* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 9105634)

Persily, C. A. (2004). Academic nursing practice in rural West Virginia. *Journal of Nursing Education*, *43*, 75-77. doi:10.3928/01484834-20040201-12

Pike Community Hospital. (2010). *Developing cultural sensitivity: Self-study guide*.

Plattner, E. M. (1987). *How beautiful upon the mountains: The Sisters of Divine Providence and their mission to Kentucky Appalachia* (Doctoral dissertation). Retrieved from ProQuest Dissertations and These database. (UMI No. 8722068)

Presley, C. (2013). Cultural awareness: Enhancing clinical experiences in rural Appalachia. *Nurse Educator*, *38*, 223-226. doi:10.1097/NNE.0b013e3182a0e556

Purnell, L. (1999). Culturally competent care for traditional Appalachians. *Imprint*, *46*, 56-59.

Ramsey, P., Blowers, S., Merriman, C., Glenn, I. L., & Terry, L. (2000). The NURSE Center: A peer mentor-tutor project for disadvantaged nursing students in Appalachia. *Nurse Educator*, *25*, 277-281.

Rosswurm, M. A., Dent, D. M., Armstrong-Persily, C., Woodburn, P., & Davis, B. (1996). Illness experiences and health recovery behaviors of patients in Southern Appalachia. *Western Journal of Nursing Research*, *18*, 441-459. doi:10.1177/019394599601800406

Ruffing-Rahal, M. A. (1991). Ethnographic traits in the writing of Mary Breckinridge. *Journal of Advanced Nursing*, *16*, 614-620. doi:10.1111/j.1365-2648.1991.tb01698.x

Russ, K. A. (2010). *Working with clients of Appalachian culture*. Retrieved from https://www.counseling.org/resources/library/VISTAS/2010-V-Online/Article_69.pdf

Schlomann, P., Virgin, S., Schmitke, J., & Patros, S. (2011). Hypertension among the uninsured: Tensions and challenges. *Journal of the American Academy of Nurse Practitioners*, *23*, 305-313. doi:10.1111/j.1745-7599.2011.00616.x

Shell, R., & Tudiver, F. (2004). Barriers to cancer screening by rural Appalachian primary care providers. *Journal of Rural Health*, *20*, 368-373.

Snyder, A., & Thatcher, E. (2014). From the trunk of a Volkswagen Beetle: A mobile nursing clinic in Appalachia. *Family and Community Health*, *37*, 239-247. doi:10.1097/FCH.0000000000000028

Tong, R. (2007). *New perspectives in healthcare ethics: An interdisciplinary and crosscultural approach*. Upper Saddle River, NJ: Pearson.

VandenBos, G. R. (Ed.). (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association.

Wallace, D. C., Tuck, I., Boland, C. S., & Witucki, J. M. (2002). Client perception of parish nursing. *Public Health Nursing*, *19*, 128-135. doi:10.1046/j.1525-1446.2002.19208.x

Williams, J. A. (2002). *Appalachia: A history*. Chapel Hill: University of North Carolina Press.

Winters, C. A. (Ed.). (2013). *Rural nursing: Concepts, theory, and practice* (4th ed.). New York, NY: Springer.