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Mississippi Delta and The Rural Nursing Theory

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Description of a Critical Issue

I graduated from a nursing school in Mississippi. In the first five years I lived in the state, not once did I visit the Mississippi Delta. During my last semester of nursing school, I participated in a project with multiple health-care disciplines. This included Pharmacy, Physical Therapy, and Occupational Therapy. This project highlighted the different cities and towns in the Mississippi Delta. Using limited resources, we developed a "health plan" for these individuals. The town we were given had a dollar general with no fresh fruits and vegetables, and over half the population did not own a car. I thought to myself, how can we educate this population to be proactive with their health if their nutrients come from a Dollar General? How can we remind these families to book yearly primary care check-ups and go to the dentist regularly if their average combined salary is $20,000, and most of the population does not have health insurance? How do we advocate for exercise, if some of the population does not even own a pair of shoes? I could not answer these questions by researching so I got in my car and I drove. I drove past beautiful lakes and streams; I drove past hardwood forests and wetlands. I saw birds, and flowers, and a beautiful sunset. All was right in the world, until it wasn't. I drove past families walking on the road, holding hands with no shoes on. I drove past homes that were falling apart and had no running water or electricity. I drove past children in the street walking home from school with torn up clothes. I drove past the most extreme poverty I had ever seen.

"One of the poorest, socioeconomically deprived, and isolated regions in the county." (Kippenbrock et al., 2014). What comes to mind when you read that quote?

Now imagine this region continuing a path of economic decline, leading to higher poverty and higher unemployment every year (Kippenbrock et al., 2014). This region is known as the Mississippi Delta. It consists of an area that stretches almost 200 miles North to South and up to 80 miles East to West from the corner of Tennessee and Arkansas through Mississippi and down to North Eastern Louisiana. This massive piece of land stretches over 3 million acres and is known for its rich culture (History, 2017). The Mississippi Delta consists of a large area of Health Professional Shortage Areas and rural areas. Most people think of the Mississippi Delta as the "heart of the south" or total "southernness", but some have titled the Mississippi Delta "the American third world" (Kippenbrock et al., 2014). This land is home to one of the nation's highest black populations per capita. In addition, the Mississippi Delta leads the nation in cardiovascular deaths making it the most common cause of death in the area (Kippenbrock et al., 2014). The Delta also has the largest poverty rate in the country in both individual and family (Kippenbrock et al., 2014). The residents in the Mississippi Delta need help. They need access to healthcare, insurance, and healthy food. They need education on what health is and education on preventative measures for diseases.

Selected Model or Theory

I chose the Rural Nursing Theory to further explain the concepts of the Mississippi Delta in relation to cardiovascular disease. Rural nursing, rural health, and people's views of health in rural areas are much different when compared to urban areas in the same state. Long and Weinert wrote the Rural Nursing Theory in 1989 using rural areas in Montana for their data collection. They used graduate nursing students and faculty

members at Montana State University to develop a theory that represented rural nursing and the population that is served in rural areas (Long & Weinert, 1989) A combination of qualitative and quantitative data was collected in the form of interviews and surveys with rural Montanans. The goal was to learn about the culture in rural Montana from its own people-rural Montanans- and find out what health meant to them (Long & Weinert, 1989). Certain rural health concepts became prominent in the surveys including "Health status and health beliefs, isolation and distance, self-reliance, and informal health care systems" (Long & Weinert, 1989 pp. 4). Additional concepts were developed including work beliefs, lack of anonymity, outsider/insider, and old-timer/newcomer (Long &Weinert, 1989). Some examples of answers from surveys included, "We worry about the here and now" and a local physician was quoted saying "Loggers don't want to hear about health care problems; they don't return until the next accident" (Long & Weinert, 1989, pp. 5). Data was organized from the surveys and interviews and developed into four domains that is shown in Table 1 (see below). This table explains exactly how the loggers in rural Montana viewed their season of life as working or not working, able to work, or not able to work. They wanted to live in the moment and only deal with their health in "times of crisis only" (Long & Weinert, 1989, pp. 5). Any further education by rural nurses was unwanted and not a part of their end goal.

I chose this theory because of how vital work is to the loggers in rural Montana compared to the individuals and families in the Mississippi Delta. Also, many of the concepts I chose are related to the concepts found in the Rural Nursing Theory. Long and Weinert found that rural citizens in Montana viewed work beliefs and health beliefs to be

completely different than urban areas of the same state (1989). “Work or fulfilling one’s usual functions is of primary importance. Health is assessed by rural people in relation to work role and work activities, and health needs are usually secondary to work needs” (Long & Weinert, 1989, pp. 6). If a logger cannot work, he cannot support himself. If a family member in the Mississippi Delta cannot work, they cannot buy groceries for their children for the week. Long and Weinert found in their surveys that loggers view health as “The ability to do work, to be productive, and to do usual tasks” (1989, pp. 7). I am assuming members of the Mississippi Delta have a similar opinion on health. Many members of the community have serious chronic illnesses that are brushed aside if they are still able to complete their work, making them even sicker. Health literacy is almost non-existent in rural areas because there are no preventative measures being taken to ensure a healthy life. Rural citizens believe they are healthy if they are able to work, and that is not always true. This explains why so many people wait so late to see a primary care provider or visit a hospital. Rural citizens are doing all they can to ensure they continue working and providing for their families. During data collection, Long and Weinert found “One is viewed as healthy when he or she is able to function and is productive in one’s work role. Specifically, rural residents indicated that pain was tolerated, often for extended periods, so long as it did not interfere with the ability to function” (1989, pp. 7). This statement leads me to believe people in rural communities are continuing to work through chest pain, GI discomfort, and shortness of breath. I have begun to assume cardiovascular disease is so prevalent in the Mississippi Delta because people brush off pain and do not go to the hospital if the chest pain is not bad enough to

stop working. I plan to apply the Rural Health Theory towards cardiovascular disease in the Mississippi Delta.

TABLE 1.1
Data Ordering Scheme

Dimension	Psychological/sociocultural
Concept	"Present time" orientation Crisis orientation to health
Variable	Definitions of time Definitions of crisis
Indicators	Hours, minutes, days Seasons, work seasons Number of injuries Number of illnesses

Application of the Model or Theory to your Critical Incident

The Rural Health Theory has many ideas on how to approach health in a rural community such as the Mississippi Delta. From this theory we have learned how different healthcare is to people in rural communities compared to their urban and suburban counterparts (Long & Weinert, 1989). Nursing in these communities is highly affected by distance, weather, beliefs, and norms (Long & Weinert, 1989). If a person does not have the transportation to receive specialized care in another town, their chronic disease will only get worse. If the patient does not trust the practitioners available, he/she will not seek advice and care from anyone. This is the reason behind cardiovascular disease being the silent killer of the Mississippi Delta. Heart disease in Mississippi is 1.4 times higher

than the national average (Mendy et al., 2017). The eighteen counties that make up the Mississippi Delta are known as the "high cardiovascular disease burden region" in the state (Mendy et al., 2017). Something needs to change to prevent these numbers from increasing.

Many concepts in the Mississippi Delta are similar to the Rural Nursing Theory concepts. The Mississippi Delta is one of the "poorest, socioeconomically deprived, and isolated regions in the country" (Kippenbrock et al., 2014). I used "poorest", "socioeconomically deprived", "isolated", "education", "access to healthcare", "economic decline", and "poverty" as concepts for this paper. The Rural Nursing Theory developed isolation as a concept from the qualitative data in Montana (Long & Weinert, 1989). Self-reliance was another concept developed. Self-reliance means many rural citizens are resistant to care they are not comfortable with making their access to healthcare minimal by attempting to be independent and not receiving care (Long & Weinert, 1989). Health belief was a third concept developed in the Rural health Theory. This concept explains the lack of health literacy and health education in rural communities because of the subjective states of health from the rural dwellers (Long & Weinert, 1989). The final concept I am tying to the Mississippi Delta from the Rural Nursing Theory is work beliefs. Work is very important to rural communities. The majority of children and families in poverty in the Mississippi Delta are living in single-parent homes (Burnett & Hobson, 2014). Actually, 76% of the families in the Mississippi Delta are living in a home with a single mom who is working full time and still making less than $15,000 a year (Burnett & Hobson, 2014). Work beliefs are such a strong

concept in the Mississippi Delta that ties together poorest, socioeconomically deprived, and poor. The work belief is that single moms have to work through any illness to keep food on the table for their families, because there is no emergency fund when you are making minimum wage and raising a family alone.

The Rural Nursing Theory was written to guide rural nursing practice. Preventative aspects were developed with regard to addressing work issues instead of promoting a long and comfortable life (Long & Weinert, 1989). This is relevant to cardiovascular disease because rural citizens are scared of a disability that would prevent them from working. High blood pressure does not prevent anyone from working but it may lead to a stroke or myocardial infarction, causing long-term disability (Long & Weinert, 1989). The Mississippi Delta has developed cardiovascular disease prevention in a community-based format through policy, system, and environmental (PSE) initiatives (Kegler et al., 2015). This was developed for worksites, schools, churches, community-wide, and hospitals (Kegler et al., 2015). I plan to use the PSE strategies that are already in place to design my health care collaboration. Using the four domains of the Rural Nursing Theory, dimension, concept, variable, and indicators, I plan to integrate the PSE strategies into the community. Using the domain of dimension, the individual is using psychological or sociocultural factors to see health and change. I will incorporate this domain into the PSE by adding slight changes throughout the community such as ensuring schools, churches, and workforces are completely tobacco free and switching out soda machines for healthier options such as water and sugar-free sports drinks. These small changes will not even be recognized by some, but can incorporate less smoking and

less sugar into people's diets without much notice by the individual. During this domain, the individual may not be ready to see change or make a change, but will be happy when they realize change is being made without much thought towards the process. During the domain concept of health, I will incorporate training for teachers so they have the tools to teach health education and I will ensure churches and worksites have a wellness program set up. Convenience is key for this domain. The individual is ready to learn about health and wellness, but the tools need to be very easy to find and accessible. For the concept of variable, I will incorporate challenges in the workplace and in schools. These challenges will have a time frame and an end goal and prizes will be given out for all that achieve them. An example is, if you hit 10,000 steps five days a week for the next six weeks, you will get a gift card to Walmart. Specifics are key to this domain, ensuring all who achieve the time frame and walking goal, are rewarded. For the last domain, indicators, I will incorporate a room for inside and outside workouts in churches and worksites depending on the season. Many people give up when it gets too hot or too cold outside. Having an indoor or an outdoor area will give individuals the tools they need to succeed, regardless of the season.

The PSE strategies developed in the Mississippi Delta showcase many strengths in the Rural Nursing Theory. A strength in the Rural Nursing Theory was the concept of lack of anonymity in the practice of rural nursing (Long & Weinert, 1989). Long and Weinert (1989, p.7) state, "Rural nurses almost always reported being known to their patients as neighbors, as being part of a given family, as members of a certain church… Similarly, these nurses usually know their patients in several different social and personal

relationships beyond the nurse-patient relationship". Using nurses in schools and churches around the community will create a cohesive environment that more people want to participate in because they know the source of education. This strategy makes it easier for the preventative information to be known to patients in all aspects of their life by people they know and trust. Another strength from this theory was talking to the loggers first hand. These interviews and conversations led to gaps in rural nursing literature and gaps in the health care needs of rural citizens (Long & Weinert, 1989). Knowing these gaps led to adapting the nursing practice to fill them. Unfortunately, with every theory, practice evolves leading to many limitations and weaknesses noted in the Rural Nursing Theory.

The Rural Nursing Theory states that rural populations view health as "the ability to work, to be productive, and to do usual tasks" (Long & Weinert, 1989, p.7). This view of health in rural populations has changed, making it a major weakness of the Rural Nursing Theory. Lee and Winters, (2004) developed a similar study in Montana fifteen years after the Rural Nursing Theory was developed. They found the rural population viewed health as being physically, mentally, and emotionally fit and having a "quality of life" (Lee & Winters, 2004). This is important because more people will take note of preventative health for cardiovascular disease if they are not just focused on the ability to do work, but instead focused on health in all aspects of their lives. Lee and Winters (2004) state, "Another factor changing the definition of health is the increased exposure to and emphasis on health, preventative strategies, and promotion of wellness through the media". A second major weakness in the Rural Nursing Theory is the lack of holistic

nursing. Since the definition of health has changed in rural communities, nurses need to have more of a holistic approach when dealing with patients. This includes directing nursing care towards not only physical wellbeing but also mental and emotional wellbeing (Lee & Winters, 2004).

Summary

The Mississippi Delta is very close to my heart and involves an area of nursing I am very passionate about: cardiovascular disease and prevention. The Mississippi Delta consists of Health Professional Shortage Areas and rural areas. The majority of the population is living in poverty and many people are dying each year from cardiovascular disease due to lack of resources and lack of health literacy. The Rural Nursing Model explains many concepts that can be used in rural nursing to guide nursing practice. This model was developed in 1989 and many concepts have changed in rural nursing since then. In addition, the ethnicity of the participants that led to the Rural Nursing Theory were all white while the Mississippi Delta consists of a largely black population. Views of health and resources available will be different for blacks compared to whites. In addition, rural areas are so diverse that we cannot compare one study on Montana loggers to all rural nursing practice. Rural nursing practice in Mississippi and Montana is vastly different, and rightfully so.

Cardiovascular disease in Mississippi is the highest in the country making preventative measures and treatment of the disease a priority for all nurses in the state. Replication of this study is needed in other states to show the differences in rural nursing by state and further expand on nursing practice. Since cardiovascular disease is a state-

wide issue in Mississippi, more studies need to be done to differentiate between health needs and health views of rural and urban populations in Mississippi. Since many rural citizens receive specialized and emergent care at urban facilities, more studies need to be done differentiating the two environments. Even though rural nursing is isolated, and may be "behind the times" more research needs to be done to ensure nurses are using evidence-based practice to "develop interventions, strategies and criteria" (Lee & Winters, 2004).

Preventative measures are the priority for lowering the prevalence of cardiovascular disease in the state of Mississippi and the Mississippi Delta. I have a passion for promoting exercise and healthy foods, but unfortunately tools to promote these topics are not readily available in Health Professional Shortage Areas or rural areas in the Mississippi Delta. Fresh fruits and vegetables are not sold in every town. Gyms are few and far between. Through the Rural Nursing Theory, I have expanded my knowledge on rural populations and have been forced to change my normal thinking on cardiovascular prevention through PSE strategies.

People in the Mississippi Delta feel abandoned in more ways than one. Many are born into poverty and struggle each day to make ends meet. Others know they should get yearly check-ups for preventative medicine, but do not have health insurance or the funds to do so. Rural nurses have a responsibility to meet people where they are. Many patients are not fully prepared or ready to make massive changes in their lives when diagnosed with a chronic disease and that is okay. Rural nursing practice needs to evolve to meet the

needs of patients as they come in and adapt with the patient. Rural nursing is vital in every state and rural nursing practice will continue to adapt and change every year.

Reference List

Burnett, C., & Hobson, J. (2014). *Women and Children Most at Risk in Mississippi*. Retrieved July 19, 2020, from https://www.wbur.org/hereandnow/2014/01/27/women-children-mississippi

History and Culture of the Mississippi Delta Region—Lower Mississippi Delta Region (U.S. National Park Service). (2017). Retrieved June 7, 2020, from https://www.nps.gov/locations/lowermsdeltaregion/history-and-culture-of-the-mississippi-delta-region.htm

Kegler, M. C., Honeycutt, S., Davis, M., Dauria, E., Berg, C., Dove, C., Gamble, A., & Hawkins, J. (2015). Policy, Systems, and Environmental Change in the Mississippi Delta: Considerations for Evaluation Design. *Health Education & Behavior*, *42*(1_suppl), 57S-66S. https://doi.org/10.1177/1090198114568428

Kippenbrock, T., Buron, B., Odell, E., & Narcisse, M.-R. (2014). Minimal Changes and Missed Opportunities: A Decade Look at Nurse Practitioners in the Lower Mississippi River Delta States. *Journal of Professional Nursing*, *30*(3), 266–272. https://doi.org/10.1016/j.profnurs.2013.09.014

Lee, H. J. & Winters C. A. (2004). Testing rural nursing theory: Perceptions and needs of service providers. *Online Journal of Rural Nursing & Health Care*, *4*(1), 10p–10p. https://doi.org/10.14574/ojrnhc.v4i1.212

Long, K. A. & Weinert, C. (1989). Rural Nursing: Developing the Theory Base. In Winters, C. A. (Ed.), *Rural Nursing: Concepts, theory, and practice* (Fourth edition). (pp. 1-14). Springer Publishing Company.

McEwen, M., & Wills, E. M. (2019). *Theoretical basis for nursing*. Philadelphia: Wolters Kluwer.

Mendy, V. L., Vargas, R., & Payton, M. (2017). Trends in mortality rates by subtypes of heart disease in Mississippi, 1980–2013. *BMC Cardiovascular Disorders*, *17*(1), 158. https://doi.org/10.1186/s12872-017-0593-3