Incorporating Clinical Experiences at a Community-Based Free Clinic to Improve

Nursing Students' Understanding of Rural, Medically Underserved Populations

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Abstract

Schools of nursing have a responsibility to incorporate content related to social determinants of

health and rural health into their curriculum and reinforce this content by providing nursing

students with clinical experiences in which they can gain hands on experience providing care to

rural residents. Free clinics provide a vital service to underserved, rural communities, but often

remain an underutilized site for nursing clinical education. The partnership between a free clinic

in west Alabama and one school of Nursing has demonstrated that students gain valuable insight

not only into the health care needs of rural populations, but also the value of interprofessional

collaboration to provide health services to this population. This clinical experience provided an

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avenue for students to meet their clinical objectives and serve a population of rural residents that were invested in their health but needed the services of this free clinic. Senior level BSN students in the Community Health Nursing course assigned to this clinical site reported an intention to serve rural, medically underserved populations after graduation.

Keywords: Rural populations, Nursing education, Medically underserved populations

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Health is closely associated with economics, education, transportation, and ecology, and many residents of rural communities suffer from poor health due to poor socioeconomic conditions and lack of access to health services. Tuscaloosa County, which is home to The University of Alabama, is situated in west Alabama, and is part of what is considered the Black Belt region which includes some of the poorest counties in the United States. This region of the state consists of 18 rural counties as defined by the United States Department of Agriculture (USDA) definition using Economic Research Service Rural-Urban Commuting Areas (RUCA) with codes 4-10 (USDA, 2009). The severity of economic struggles places residents of these counties at a great disadvantage when attempting to receive health care. The Good Samaritan Clinic (GSC), which is located in Tuscaloosa County, is a free clinic providing care to rural residents of west Alabama.

In order to increase baccalaureate prepared registered nurses (BSNs) an understanding of the unique health needs and health care access of residents living in rural and underserved areas of Alabama is needed. Educational opportunities must be offered that provide clinical experiences with these populations. Faculty in the Community Health course at The University of Alabama

(UA) Capstone College of Nursing (CCN) developed a clinical experience designed to allow senior-level BSN students opportunity to provide care to rural residents who receive care at the Good Samaritan Clinic (GSC). This clinical teaching strategy utilizes academic and community partnerships to provide an opportunity for students to work interprofessionally in a primary care setting. The purpose of this article is to provide nurse educators with an understanding of how this type of teaching strategy can be implemented in baccalaureate programs and the benefits provided to BSN students.

Background

Rural areas are more likely to lack adequate primary care and mental health care services, and all of Alabama's 67 counties are designated as medically underserved areas (MUA) or contain medically underserved populations (MUP) (HRSA, 2016). Because of high rates of obesity, cardiovascular disease, and diabetes, Alabama ranks 46th in the U.S. for overall health and 50th in health outcomes (UHF, 2016). Chronic diseases are a serious problem in Alabama. Cardiovascular disease (CVD), the leading cause of death, kills more Alabamians than all forms of cancer combined (ARHA, 2013). In 2012, Alabama adults ranked fifth in the nation in overweight/obesity (ARHA, 2013). Approximately 34% of adults in Alabama are obese and 12.9% have diabetes, ranking 4th in the U.S. (ARHA, 2013), with these rates are even higher in the rural counties. Other risk factors for CVD include the lack of physical activity and poor dietary habits. More than half the deaths that occur each year can be attributed to modifiable health risk factors.

There is a growing recognition that providing rural health clinical experiences as part of undergraduate nursing education is successful in improving recruitment of nurses to work in rural

communities. Schools that have implemented these types of experiences, both in the United States (U.S.) and abroad, have demonstrated increased interest in careers in rural health (Coyle, 2012; Lea et al., 2008; Richards, O'Neil, Jones, Davis, & Krebs, 2011; Younge, Ferguson & Myrick, 2006). Other reported benefits of rural health immersion experiences include providing students with the opportunity to develop relationships with patients and to collaborate with other health professionals (Casimiro, Hall, Kuziemsky, O'Connor, & Varpio, 2015; Van Hofwegen, Kirkham, & Harwood, 2005). In addition, students gain an increased understanding of health care delivery from a systems perspective and greater opportunity to experience the realities of life for rural patients including the impact of socioeconomic status, isolation, service gaps, and barriers to care (Erkel, Nivens, & Kennedy, 1995; Garner, 2015; Van Hofwegen et al., 2005).

A clinical experience which allows students to gain hands-on experience working with residents of rural counties was implemented in the GSC, which is an interdenominational Christian ministry that provides primary health care and referral to outside health services within a network of pro-bono medical providers. The clinic was started in 1999 by a physician who recognized the need for primary care for patients who did not have health care insurance and did not qualify for government assistance. The clinic serves indigent adults of all races, creeds and genders. Over 21 % of residents, (estimated at more than 63,370 in 2014) living in the rural counties served by GSC live at or below the Federal Poverty Level (FPL). The Affordable Care Act makes insurance available for indigent adults but does not require individuals to purchase unless their household income is above 200 % of the FPL. Clinic patients must have an income less than 185 % of the FPL, and thus are too poor to afford insurance even with assistance.

One aspect of a clinical experience in a community-based free clinic that is particularly beneficial to nursing students is that they gain an understanding that the care must be provided with limited resources and is much different than the acute care setting. Care at the GSC clinic is provided by volunteer physicians, nurse practitioners, nurses, phlebotomists, social workers, dietitians and pharmacy technicians. The part-time staff of eight employees is assisted by over 100 volunteers who work in every area of the clinic. Also providing care are students earning their degree in healthcare professions including medicine, nursing, pharmacy, nutrition, social work and health promotion. Because the clinic does not currently provide routine wellness and preventive care, all clinic patients are sick. The primary chronic medical problems experienced by patients are hypertension, diabetes, high cholesterol, asthma, bone and joint conditions, stress and gastric conditions. Patients also are treated with non-emergency acute illness and injuries. If patients need care beyond the scope of the clinic, every effort is made to locate a pro bono medical provider. This includes hospitalization, surgery, physical therapy and specialty physician care.

Another objective of the clinical experience at the GSC is that students leave with an understanding of how patients access care in a rural community setting and who makes up the patient population in free rural clinics. Patients of the GSC are often referred by the hospitals or private physicians but can also self-refer. New patients make an appointment with a clinic social worker to determine eligibility. The GSC serves approximately 550 patients annually. There are roughly 3,000 patient visits per year. The value of donated care provided by the GSC annually is over 3 million dollars and in 2015 the value of medication provided to patients was over 1.5 million dollars. Patients served by the clinic are between 18-65 years old, with the majority of patients falling between the ages of 35-60. Fifty-one percent of the patients are white, 38 % African

American and over 10 % Hispanic. Nine percent of the Hispanic patients are Spanish speaking and require an interpreter. All care provided at the clinic is free for the patients. The clinic is supported financially by individual donations, area churches, foundations and community grants.

This teaching strategy was implemented in the Community Health Nursing course offered in the fourth semester of a five-semester curriculum in the UA CCN. It is a required course for fourth semester students and is offered in the fall and spring semesters. Each student is required to complete 46 hours of community health clinical during the semester. The number of students varies each semester, but approximately 100 students each fall and spring are enrolled in Community Health Nursing. Because of the large number of students enrolled in the course and the limited number of clinical days, not all students can be scheduled for a clinical day at the GSC. However, approximately 32 students are able to get a clinical day at the Good Samaritan Clinic each semester. The students work closely with a CCN faculty member who spends one day a week at the GSC as a volunteer RN. In addition to time spent with this faculty member, students also work closely with the medical residents, pharmacists, and social workers. This clinical experience substantially benefits the underserved areas of West Alabama while providing undergraduate nursing students with an opportunity to learn more about the health care needs of this population.

The purpose of incorporating this clinical experience at the GSC is to increase experiential training opportunities for senior-level BSN students in a primary care community-based setting. This clinical experience also expands upon an academic-practice partnership between the Capstone College of Nursing and a community-based clinical site (Good Samaritan Clinic), while providing senior-level BSN students with a meaningful clinical experience and training in a medically underserved rural community. Increasing educational opportunities in rural health in the

baccalaureate program will address the critical shortage of BSN prepared RNs practicing in those areas.

Teaching Strategy Implementation

In the Community Health Nursing course at The University of Alabama Capstone College of Nursing an overarching goal is to expose students to opportunities to provide care to rural populations in order to gain a perspective on barriers that hinder quality healthcare in vulnerable populations. The theory portion of the Community Health nursing course includes content related to health risks and health promotion in rural and medically underserved populations. Through lecture and class discussion, students are presented with information from the Centers for Disease Control and Prevention, the Robert Wood Johnson Foundation, the Department of Health and Human Services, and the state health department related to the leading causes of morbidity and mortality in rural populations.

Implementation of this strategy begins by assigning students to clinical at the GSC in pairs. The students arrive at the clinic an hour before the first patient visit is scheduled. They meet the CCN faculty member who is a volunteer RN at the clinic. Pre-conference and orientation to the clinic includes a tour of the clinic, a brief history of the clinic and a description of the objectives of the clinical experience. Students are given access to the medical records of the patients scheduled that day. The medical residents, pharmacy students and nursing students all have the opportunity to review the patients' records and ask questions about the plan of care. Discussion between the students encourages and strengthens the students' confidence in interprofessional communication. The nursing students work with the RN to complete an initial assessment of patients including, height, weight, vital signs and physical assessment. The nursing students are

required to reconcile the patients medications with those listed in the medical record during initial assessment. The nursing students then place the patient in a room and give report to the pharmacy students and medical residents on the initial assessment findings. Students are present in the exam room with patients when they are seen by the medical resident. Based on the physicians plan of care the nursing student assist with procedures that may include; EKG, venipuncture, pregnancy test, vision screening, diabetic education, and referrals for imaging. The students participate in the discharging of patients, which is done by an RN after all of the services ordered are provided. During the discharge process students learn the importance of ensuring that all orders have been completed, any referrals for outside pro-bono care have been initiated and any new medications or changes to medications is discussed with the patients. After all patients have been discharged the faculty preceptor has a post conference to review the day's activities and answer any questions that the students have.

After each clinical day, students are required to provide narrative evaluations of the experience. The faculty in the Community Health course developed clinical journals which asks students to address various components of the clinical experience. These clinical journal questions are posted online, and students type their responses and submit them to their clinical instructor. There are three questions the students must respond to. The first question asks, "What happened?" Students are told to describe in detail the facts and events of the clinical experience. They are guided further to reflect upon such things as the health problems of the patients of the GSC and how they felt working with this population. The second question asks, "So what?" Students are guided to discuss their feelings, ideas, and analysis of the clinical experience. Specifically, students are asked to address how the clinical experience at the GSC was different from or the

same as they expected. Finally, they are asked, "Now what?" Students are instructed to consider the broader implications of the clinical experience and apply learning. For example, they are asked to discuss what they see as the root causes of the health problems or issues in rural patients who sought care at the Good Samaritan Clinic.

Reflective Student Feedback

Results from the clinical journals indicated the majority of students felt better prepared to care for rural patients, as well as developed a better understanding of the unique health needs of this population and the need for free health clinics such as the GSC. In addition, students reported that this experience has increased their desire to work with similar populations after they graduate. Some student responses include:

- "This population is at risk for poor health due to financial problems.... I loved working with this rural population. The experience was better than I expected.... I am definitely going to take what I learned in this clinical experience and use it to better care for patients in the community."
- "It was my last day of clinical and I am so happy it was at GSC. It was for a GREAT cause and the patients were very grateful.... I will make it a goal of mine, once I graduate with my degree that I will volunteer at a clinic!"
- "I really enjoyed working with this population because it was different than any regular hospital setting..... I learned that patient education is critical in this particular rural/vulnerable population. I left the day with a heavy heart over the hurt that was experienced by some patients. They desperately wanted to no longer experience certain health issues but did not have the funds in order to pay for medicine or surgery....This

clinical rotation confirmed to me that offering health care to those without available resources has a huge impact on that particular population not only in their physical health, but their spiritual and mental health as well."

- "Working with this population allowed me to see another side of life and to be less judgmental. It is easy to judge people for being overweight and not making healthy decisions but sometimes it is not easy to make healthy decisions when you are busy with trying to support your family and cannot afford or access the healthier foods. I learned that health care providers have to change the way they diagnose and treat patients based on the population....I always thought that primary care was boring, but I do like that you get to talk to the patients more and really help them. My experience was better than expected. I think this experience will help me to consider my patients' personal lives more when teaching them. I also think I will be more understanding of noncompliance and be more motivated to delve deeper to determine the patient's reasons for being noncompliant or having certain problems in the first place."
- "The part that stood out to me as the biggest health concern for the patients was actually these patients' lack of insurance and their inability to receive the best medical care available...The rural working poor patient population seems to be in a limbo where they need to either fall even lower into poverty in order to qualify for government assistance or find another job with insurance that will cover their medical costs, and neither is an easy option...This clinic opened my eyes to the needs of the less fortunate and it has inspired me to want to find a similar operation to the Good Samaritan Clinic to contribute to wherever I end up after graduation."

• "I really liked serving this rural population because I could really sense that good was being done and that these people truly depended on this free rural clinic...I will remember that clinics like this are just as important as the hospital. It taught me the entire community needs to work together to make this happen."

In addition to expressing how much they learned about rural populations and the services provided by a free clinic, students also valued the experience because of the opportunity to work so closely with other professions. Many students commented that it was beneficial to see how the interprofessional team conducted the patient assessments and the types of questions that were asked. Students were able to see how physicians treat patient conditions when expensive medical tests cannot be ordered or expensive medications prescribed. Students stated that in other classes they were not often exposed to other health care providers' roles in providing patient care or how they interacted as a health care team, so they found this aspect of their clinical day at the Good Samaritan Clinic particularly beneficial.

Recommendations for Nurse Educators

Free clinics are excellent sites for experiential learning opportunities that enable nursing students to gain an understanding of the unique health needs of rural residents, providing primary care with limited resources, and working within an interprofessional team. The main limitation of this clinical experience is that all of the community health students are not able to participate in the GSC clinical experience due to the limited clinic hours and the lack of faculty who are available to instruct them at the clinic. Strategies to overcome these barriers include identifying other clinics in a 60-mile radius of the nursing school that provide primary care to rural residents who have

limited to no ability to pay and to enlist the help of health care professionals in other disciplines to ensure that the maximum number of baccalaureate students an opportunity to participate in this clinical. Involving faculty from other disciplines not only increases the opportunity for more students to get clinical experience in a rural setting, it also provides them with valuable interprofessional education and increases their understanding of working within a team. However, the success of this experience is dependent upon faculty providing information about the clients they will see in the clinic, the challenges they face as rural residents in obtaining health care, and how the clinic operates. Any faculty working with students in this type of setting must be knowledgeable of rural population health issues. These types of clinical experiences are imperative to prepare nurses in rural states, such as Alabama, with a clear understanding of the health care needs in their state.

Conclusion

Schools of nursing have a responsibility to incorporate content related to social determinants of health and rural health into their curriculum and reinforce this content by providing nursing students with clinical experiences in which they can gain hands on experience providing care to rural residents. Free clinics provide a vital service to underserved, rural communities, but often remain an underutilized site for nursing clinical education. Nursing students exposed to underserved, rural populations are able to better understand the health needs of this population and consequently pursue serving this population after graduation.

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