Faith & Fitness in Farming Families

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Abstract

Although agriculture is a leading industry in North Carolina, farmers and farmworkers are one of the most underserved populations in the state due to rural health disparities. The Faith & Fitness in Farming Families Doctor of Nursing Practice (DNP) project's primary purpose was to increase health education and improve self-efficacy in personal health and wellness for individuals who live, work, play, and pray in farm communities. The project addressed pertinent health initiatives to a rural, farming population in eastern North Carolina through primary and secondary intervention tools. Through the utilization of the RE-AIM framework, a faith-centered tool was created and implemented to empower participants to self-screen for conditions and self-refer for care as the means to reduce harm from preventable and manageable conditions. Following the creation of a health-focused Bible study curriculum, a 6-week, small group study was held at a rural Methodist church in eastern North Carolina. An average of 10.17 adults participated in the Bible study and provided positive evaluation of the program through Likert surveys and additional comments. Community-based health initiatives, such as this DNP project, allow health care providers to better understand their patients' lives and hardships, and seek ways to break through possible barriers to care. The more improvements in overall wellbeing, the less need there will be for secondary and tertiary interventions, and less strain there will be on the healthcare system.

Keywords: rural, farming, health disparities, primary care, community-based, faith-based

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Section I. Introduction

Background

North Carolina is home to more than 50,000 farms, totaling over eight million acres of farmland (The United States Department of Agriculture, 2019). While agriculture may be a leading industry, farmers and farmworkers take the lead as one of the most underserved populations in the state. Rural health disparities are rooted in "economic, social, racial, ethnic, geographic, and health workforce factors" (The North Carolina Department of Health and Human Services [NCDHHS], 2019). These health disparities lead to high rates of disease and higher mortality rates. While health care may be in short supply in rural areas, churches are still prominent features of the community. A faith-based health promotion tool is an opportunity to reach these rural, agriculturally focused, underserved populations.

The Health Disparity

Farmers are at increased risk of work-related injuries, chemical exposure, heat-related illnesses, green tobacco sickness, untreated anxiety and depression, and uncontrolled chronic illnesses. Many farmers and workers face barriers to care, including high costs of healthcare, long work hours, transportation difficulty, language barriers, and health care workforce shortage due to geographical isolation (NCDHHS, 2019).

Eastern North Carolina

Agriculture has a stronghold in eastern North Carolina, and residents of the 29 counties that comprise the region have substantially higher risks of mortality from preventable chronic diseases than the rest of the state. According to maps produced by the North Carolina Department of Health and Human Services (2018), eastern North Carolina (ENC) is medically underserved in terms of primary care, mental health services, and dentistry. More than 18,000

individuals have died from heart disease or strokes in North Carolina. Eastern North Carolina has a mortality rate between 12% and 20% greater than that of North Carolina. All forms of cancer in ENC have an 8.3% higher mortality rate than the 20% mortality rate for North Carolina. The diabetes mortality rate is 31.4% higher than the statewide rate, which is surprisingly only 3.1% (American Heart Association, 2018; East Carolina University, 2017). These rates, specifically the variation between statewide and rural ENC, show the significant disparities in health. A report by East Carolina University, using 2014 United States mortality data, claimed that if ENC was its own state, it would rank 43rd in terms of premature mortality, which is death before 75 years of age (East Carolina University, 2014).

United States Preventive Services Task Force

The United States Preventive Services Task Force (USPSTF) publishes health screening recommendations. While a medical provider usually performs these screenings, some can be conducted in a self-screening format. Some of these recommendations from the USPSTF (2020) include:

- Abnormal blood glucose and type 2 diabetes mellitus screenings for adults between the ages of 40 and 70 years old who are overweight or obese
- Genetic assessment for all women with personal or family history of breast, ovarian, or tubal cancer associated with BRCA-related gene mutations
- Colorectal cancer screenings starting at 50 years old and continuing until 75 years of age with various testing methods
- Anxiety and depression screenings for the general adult population
- Fall prevention exercises for individuals at high risk
- Behavioral interventions to prevent heart disease through diet and exercise

- Tobacco cessation in adults
- Unhealthy alcohol use screening in adults
- Behavioral interventions to reduce obesity in adults

Health Benchmarks

This project addressed several initiatives of Healthy People 2020. Access to health services, including insurance coverage, healthcare services, timeliness of care, and reduction in barriers, directly targets the rural, underserved population of farmers and agricultural workers. Barriers to care result in unmet needs, delays in care, reduction in preventative healthcare, financial hardships, and preventable hospitalizations (Healthy People 2020, 2020a). In addition to disease-specific objectives, Healthy People 2020 also addressed the need for community-based health opportunities. One of the goals was to "increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and injury, improve health, and enhance quality of life" (Healthy People 2020, 2020b). Healthy People 2020 also focused on social determinants of health, which involved health equity, the health of populations, community programs, and commonalities of local, state, and federal health initiatives (Healthy People 2020, 2020c). Healthy People had several goals that could be accomplished through self-screening and education, including heart disease and stroke prevention, injury and violence prevention, mental health and mental disorders, nutrition and weight status, occupational safety, and substance use and abuse.

Healthy NC 2030 indicators include social and economic factors, physical environment, health behaviors, access to care, and health outcomes, but they do not specifically address rural, underserved populations (Healthy People 2020, 2020d).

The United Methodist Church

The Church has historically been an anchor institution and a very influential part of society. As early as the Roman Empire, the Church has played a role in mercy ministries for the poor, homes for the aged, orphanages, and hospitals (Pillay, 2017). Even in colonial America, the Church ran the government, and taxes were paid to the Church to improve social welfare.

Revival gatherings, known as camp meetings, were hosted throughout the United States in the 19th century. Hundreds would attend for preaching, prayers, and fellowship. Later, a similar format was used to spread Methodism throughout the country. John Wesley, the founder of Methodism, believed that individuals should strive for Christian perfection. He emphasized the simple importance of putting faith and love into action, which continues to be hallmark belief of Methodism today (The United Methodist Church, n.d.). Methodism, led by preachers riding in circuits instead of in buildings, thrived in the small settlements in America. Although the country has evolved, churches remain integral institutions in rural communities because of geographical isolation, shared identity, and lack of other institutions in the area (Hatcher, 2018).

Even now, in small towns and rural communities, when manufacturing and businesses have gone, agriculture remains. The Church remains. The tolling of church bells continues to set the pattern for the week – six days of labor and a day of rest. According to John Wesley, the day of rest should be used for resting the mind, body, and soul, and that the three are not separated (Maddox, 2012). The Methodist church remains interested in healthcare through the health ministry committee. The mission statement of the health committee is “Promoting Health and Wellness Across the Life Span” (North Carolina Conference of the United Methodist Church, 2019). The influential role of the Church in agriculture communities, and the Methodist view of integrative medicine, creates a wholesome environment for improving health and spiritual care.

Problem Statement

Many rural farming families have less health care than others. Time, distance, and lack of insurance are all barriers to them receiving adequate access to healthcare. If individuals do not have the recommended routine health maintenance, such as education and screenings, they may be more likely to be affected by preventable chronic health conditions.

Purpose Statement

The purpose of this project was to increase health education and improve self-efficacy in personal health and wellness for individuals who live, work, play, and pray in farm communities. This DNP project used the creation and implementation of a faith-centered tool to empower individuals to self-screen for conditions and self-refer for care as the means to reduce harm from preventable and manageable conditions.

Section II. Evidence

Literature Review

The proposed plan involved search strategies through East Carolina University's Laupus Library's One Search database, which incorporates results from all individual allied health databases. Other databases used included CINAHL and Medline via PubMed. These databases were chosen due to their focus on allied health. Mesh terms included rural health, farmers, community health, primary healthcare, interventions, community, health promotion, and faith-based. All results were filtered using limitations of five years, full-text, English language, and peer-reviewed results.

Prior to the application of inclusion and exclusion criteria, Laupus Library's One Search database provided several thousand articles, CINAHL provided more than 50 results, and PubMed resulted in more than 300 articles. Inclusion criteria were applied, including subjects or headings of public health and rural, age range for adults, and expanded search terms of methods, organizations, and psychosocial factors. Exclusion criteria included health terms not related to primary care, including HIV and age ranges for children and adolescents. Following the application of inclusion and exclusion criteria, there were still several hundred articles available via Laupus Library, which were then sorted by relevance. The specific databases, CINAHL and PubMed, resulted in 17 and 36 articles, respectively. All titles of articles and abstracts were read for relevance to the proposed project. Following that filter, only 16 articles remained. After reading the 16 articles in their entirety, only 14 articles were considered relevant with appropriate evidentiary support. The selected articles discussed studies with at least level four evidence, consisting of cohort studies. Most studies consisted of level five evidence from systematic reviews of descriptive and qualitative studies.

Current State of Knowledge

Since one of the most significant barriers to rural healthcare is the actual distance to practices and appointment locations, it makes sense to provide some elements of healthcare through community-based methods. Community-based approaches to healthcare can include care coordination through healthcare professionals, education through local schools, or utilizing community buildings as meeting spaces. Throughout project research, while there were specific practice guidelines available for providing community-based healthcare in rural areas, there were several reports and reflections of individual experiences. This project focused on agriculture-based, farming populations; there was little to no data regarding community-based public health in the targeted population. There was data for overall rural health promotion, which was included in this literature review.

One of the most telling aspects of community-based health interventions is the perception of the population. While not directly promoting an intervention, a study by Zarychta (2015) delved into a requirement and possible barrier for community health. In a sample size of 2,800 households, Zarychta conducted telephone surveys to determine the relationship between community trust and the health of the community. Zarychta defined trust as "a belief that others will not deliberately or knowingly cause harm." To link individuals to community health resources, individuals must trust their neighbors. In this study, between 2009 and 2010, households were asked to describe their state of health, level of trust with their neighbors and community, location of their household (rural or urban), education level, ages of those who live in the household, neighborhood health status, and level of access to primary care. The results of this study showed a positive correlation between those with higher levels of trust and health status. Although this correlation does not equal causation, it does remind health care providers

and community leaders of the need to understand their target populations. If populations are not trusting of its leaders, community-based health interventions will not succeed. Small, rural communities appear to be more close-knit than large, urban areas, which may lend itself to more positive outcomes from community-based health promotions.

Another study focused on community-based health promotion that utilized newspapers as a way to disseminate health information in rural areas. Young et al. (2015) targeted all newspapers in a rural, midwestern state and provided articles for readers in both rural and urban areas. Of the 252 newspapers throughout the state, more than half replied to researchers with information on their readers' demographics. More than half of the newspapers who classified themselves as serving a rural community ran health articles provided by the researchers. Like previous research indicated, in these rural areas, the most common topics published were related to nutrition, cancer screenings, and viral illnesses like the flu. This study indicated that rural communities and community leaders are interested in creating a healthy environment for their neighbors and that a community-based method of health promotion would be well-received.

A study conducted by Conway et al. (2016) showed that rural residents' health care could be improved through care coordination with a community care team. This community-based participatory research study focused on using community health workers to improve health outcomes in rural, medically underserved areas. They utilized the electronic health record system to identify 165 adults with potential health risks and asked them to participate in a three-year study. The participants completed a survey twice per year to describe their "physical functioning, role limitations due to physical health and emotional problems, energy level, emotional well-being, social functioning, pain, and general health status." Evaluations of the participants' medical records showed a decline in emergency room visits, exacerbations of chronic illnesses,

and less health-related costs after utilization of the care team. The community care team model involves public health, behavioral health, community-based recovery program, educational programs, housing, services for the elderly, social services, and clinics, and hospitals. While this study seemed successful during its course, rural communities are unlikely to be able to fund similar long-term, complex interventions with professional healthcare workers. The in-depth knowledge of care coordination and the importance of focusing on all areas of health does provide insight into future programs.

Current Approaches to Solving Population Problem

This project was conducted in eastern North Carolina, where, as discussed previously, large percentages of the population are affected by preventable chronic diseases. Eastern North Carolina is also a very rural, agriculture-based region, with limited access to health care. The project partner was a United Methodist Church in a rural community. Several studies have shown the relevance of faith-based organizations in health promotion initiatives.

A study by Tagai et al. (2018) discussed the benefit of utilizing church resources to offer health-related activities. The study mentioned functional capacity, including the actual building, space, and parking lots, as well as knowledge and experience from church members such as dieticians, physical therapists, physical education teachers, or healthcare professionals. A study of a multilevel faith-based public health initiative in rural Alabama by Powers et al. (2017) showed that churches are known and able to provide common meeting space for health education sessions and that congregations can function as accountability groups.

Church congregations are largely social beings. Churches in eastern North Carolina consist of homecoming potluck lunches, Wednesday night dinners, and other social gatherings centered around southern, fried, crispy, greasy, deliciously unhealthy foods. Churches are not

known to be places of healthy eating with activities promoting good health. However, a study by Hermstad et al. (2018) demonstrated that churches could intentionally reduce serving unhealthy foods and promote healthy nutrition, as well as exercise. In the study, six churches received small grants to help change their social environment to a healthier atmosphere. Congregations were educated on the importance of a healthy diet and exercise and trained to promote healthy lifestyles with other church members as well as members of the community. This study showed the correlation between the Church and society and how much influence the Church and its activities can have on members' lives.

A study conducted by Koh and Coles (2019) in collaboration with churches through the Interfaith Health Program of Emory University focused on providing actual health care. Ten churches were selected to help increase the rates of annual influenza vaccinations by addressing socioeconomic barriers. Some churches chose to go directly to underserved populations like homeless adults and migrant farmworkers, while others focused on education efforts, transportation, and mistrust of vaccinations. This interdisciplinary effort between faith communities, pharmacists, health departments, and pharmaceutical companies provided vaccines for almost 20,000 individuals, many who lacked health insurance.

Evidence to Support the Intervention

Aside from providing actual health care, which can be limited in a small project, Bible studies are likely to be successful in faith-based health promotion initiatives. A study by Tettey et al. (2016) was conducted throughout a 12-week Bible study and training course. Lay health educators were trained on cardiovascular health, medical conditions, and prevention, and were given Bible study tools to connect cardiovascular health with health-related scripture. At the end of the sessions, more than 200 laities were trained to take the resources back to their

congregations. Faithful Families, another longer-term, health-related Bible study, spread throughout North Carolina in 2008. The Faithful Families study, reported by Hardison-Moody and Yao (2018), was piloted in 41 churches in four counties, focusing on areas with high levels of poverty. Clergy and lay leaders distributed health assessment forms to congregations, which resulted in almost 1,000 respondents. As a result, a 9-week series was created to challenge participants in their spiritual and physical health connections. While the study was primarily focused on healthy eating and physical activity, it can be reproduced to highlight various aspects of physical health.

Another well-known Bible study is *First Place 4 Health*. This Bible study, which began in 1981 as a weight loss program, has evolved to include all aspects of physical health and has over a half-million members. *First Place 4 Health* promotes itself as a "Christ-centered way to lose weight and get healthy," while focusing on emotional, mental, physical, and spiritual health through a faith community (First Place for Health, 2020).

Faith-based organizations can play a role in promoting health care, education, screening, self-efficacy, and accountability. Faith communities are some of the most trusted, particularly in eastern North Carolina, which helped promote this project.

Evidence-Based Practice Framework

The focus of this project was on rural, agriculture-based, underserved residents of eastern North Carolina. One of the models that best fit this project and research was Urie Bronfenbrenner's Socio-Ecological Model of Human Development (1981). This model delves into the individual's knowledge and belief system. It incorporates the microsystem, which consists of relationships with peers, family, church members, and other interpersonal factors that can promote or restrict certain behaviors. It also includes the exosystem, which involves

significant community factors like social welfare, the media, laws, regulations, and policies (Bronfenbrenner, 1981; Rural Health Information Hub, 2020).

The framework for this project was the RE-AIM framework. Glasgow et al. (1999) created a framework that has long since been effective in evaluating the public health impact of health promotion interventions. As this project surrounded health promotion initiatives in a public health setting, the RE-AIM framework was the ideal model. RE-AIM, which stands for Reach, Effectiveness, Adoption, Implementation, and Maintenance, translates research into action. This project was researched to reach the targeted population; the effectiveness of the proposed intervention was evaluated through a literature review. Project partners approved the proposal to be adopted by the church, and the Bible study was appropriately implemented. After project completion, the proposed intervention will be maintained through dissemination across the North Carolina Conference of the United Methodist Church via the NCCUMC Health Committee.

Ethical Consideration & Protection of Human Subjects

Florence Nightingale believed in the ethics of confidentiality, effective communication, and the importance of meeting patients' needs (Nightingale, 1859). More than 150 years later, ethics are still valuable to daily work and are especially important with research and studies with human populations. Considerations have broadened to include federal regulations and professional codes of ethics. Ethical principles are still centered around respect for others, beneficence, justice, and equity. Collaborative Institutional Training Initiative (CITI) modules are focused on improving the trust in research by providing quality courses in ethics, regulations, researchers' responsibilities, administration, and other topics surrounding professional research

(Collaborative Institutional Training Initiative, n.d.). These modules were completed in preparation for the proposed project planning and implementation.

The proposed project involved direct interaction with individuals in a community setting. While the project was a qualitative study, it did not have scientific research components. Participants were recruited for the Bible study strictly on a volunteer basis and were informed of the purpose of the program, its relation to education, and the intent to publish any results. No personal information, including medical records, was reviewed. The proposed program had only intentions of improving health and well-being. Although the target population could have been considered vulnerable due to the underserved demographics, there did not seem to be any potential for harm to the target population. The Bible study was intended to be publicized at various community settings and churches, allowing the intervention to be equitable to everyone in the target population.

Section III. Project Design

Project Setting

The community in which this project is conducted was a rural eastern North Carolina county. Like most eastern North Carolina communities, agriculture is very prevalent in the area. In little more than 250 square miles, there are more than 200, primarily family-run farms, totaling almost 100,000 acres of farmland. Farms in the county are mainly used for livestock production but almost 30% are used for growing crops. More than 75% of the farms are run by white men, and the largest age range of farmers is between 35 and 64 years of age (United States Department of Agriculture, 2017).

Eastern North Carolina farms go through crop growing seasons and bring in tens of thousands of migrant farmworkers. Migrant farmworkers are a fixture in tobacco fields of eastern North Carolina in the heat of the summer season. Through conducting a windshield survey, heavy machinery was found driving along two-lane roads and plowing flat fields. In early to mid-spring, farmers and farmworkers were busy plowing fields or otherwise preparing the land for planting crops. The community's top growing crops include soybeans, corn, sweet potatoes, and tobacco (United States Department of Agriculture, 2017). Alongside the highly producing crop-growing farms, hog farms are prevalent in county; more than 70% of the farms in the area are for producing and raising livestock (United States Department of Agriculture, 2017).

Health and safety hazards from crops grown in this area and hog farming include injury while working with machinery and caring for animals, chemical exposure from pesticides, disinfectants, and medications for animals, dehydration and inadequate nutrition from long days in the fields, lung diseases from inhaled particles, zoonotic diseases, and specific crop-related illnesses such as green tobacco sickness (GTS) (Muirhead & Alexander, 2013; Rumchev et al.,

2019; United States Department of Labor, n.d.). Precautions to be taken for these concerns include appropriate maintenance for machinery, specialized training for all farmworkers on machinery and animals, education to prevent and recognize the signs of dehydration and nicotine poisoning from GTS, wearing personal protective equipment when around dust or other airborne particles, ergonomics training, and thorough hand hygiene (Rumchev et al. 2019, United States Department of Labor, n.d.).

Farmers are seven times more likely than other individuals to have heart disease and should be screened regularly and be offered nutritional counseling (Ryan, 2019). Routine healthcare visits for farmers and farmworkers should include cancer screenings as well as hearing and vision tests due to their high risk of occupational exposures and injuries. Since farmers' livelihoods rely on crop production or raising livestock, it is easy for them to worry about farm destruction from hurricanes, long periods of heavy rain or droughts, media surrounding controversial hog farms, and new laws and regulations. Since 2012, farms in eastern North Carolina have seen a decrease of more than 10% in total market value for their agriculture commodities, a decrease in more than 50% in government payments, and more than 30% decrease in net farm income (United States Department of Agriculture, 2017). Farmers, farmworkers, and their families should be considered an at-risk population and should also have routine mental health screenings.

Description of the Site and Population

The project was conducted at a United Methodist Church in the rural community. The church was located on the outskirts of the county seat, as compared to the downtown United Methodist Church. It was surrounded by farmland owned by families who had attended the church for more than 200 years. The congregation worshiped between 40 and 60 individuals on a

regular basis, with most members ranging between 50 and 80 years of age. Most congregants were individuals who were raised in farming families, married into those families, retired from farming, and whose ancestors founded the church. While a large number are retired, some members of the congregation were still involved in full-time farming, with both crops and livestock. In addition to the strong agricultural ties to the community, the church was involved in service activities including providing weekend meals to elementary school students in need, school supply drives, adopting families at holidays, and partnering with the local food pantry.

Facilitators for this project included the strong ties to agriculture and my target population, supportive congregation members, and a large fellowship hall that could be used for gatherings and activities. Additionally, this congregation already participated in Sunday school classes and Bible studies, which allowed for this program format to be easily accepted.

Barriers to this project included participants' general understanding of health care and how health is viewed in this area. Although research proved that there are gaps in health care in rural areas, this community was located close to one of the largest health systems in North Carolina, and larger surrounding towns offered a variety of health services easily accessible to members of the community. In regard to the actual church congregation, many of the members were of retirement age and had access to Medicare. Other members, even those in farming families, had access to health care through spousal insurance. Therefore, participants may not have had direct understanding of the importance of this project topic or believe its relevance. Another barrier to this site was the proposed format. Although the actual church congregation was supportive of Bible studies, they may not have been open to a weeknight program that would attract more members of the community, as compared to a Sunday morning study. Finally, another barrier to the project may have stemmed from lack of participation. Since fewer

individuals attend a traditional church in today's society, there may have been less participation than if the event was hosted in a different format or at a different location.

Project Team

The intended project team included me, the project leader, Dr. Janet Tillman, the faculty mentor, the committee chair of the ministry team at the church as an additional project partner and liaison, guest speakers for weekly sessions, volunteer nursing students, and participants in the actual Bible study program. In addition to the church partnership, to promote more participation from the community, the program was intended to be advertised in other local churches, in community centers, and local events.

Project Goals and Outcome Measures

The goal of this project was to increase health education and improve self-efficacy in personal health and wellness for individuals who live, work, play, and pray in farm communities. This goal was obtained through the creation and implementation of a health-focused Bible study program that educated and supported participants in their personal health and faith journeys. The six-week Bible study program was guided using the RE-AIM framework and evaluated using both quantitative and qualitative data.

Description of the Methods and Measurement

The RE-AIM framework was be utilized for the implementation of this project, and data tracking and evaluation was conducted through Likert surveys completed each week. The RE-AIM framework, which stands for reach, effectiveness, adoption, implementation, and maintenance, was easily conducted in this community-based church setting. The project reached the target population as it was conducted in a church in a rural, farming community, the

information was relevant and therefore efficacious, and the church family willingly adopted this Bible study since congregants were very supportive to new practices and events.

Discussion of the Data Collection Process

Using the framework guidelines as a tool assisted with the actual implementation and data collection process. The guidelines recommend monitoring data periodically, which was completed with Likert scales of satisfaction, which provided quantitative data, and through qualitative data in the form of suggestions from participants. Like the framework recommends, the program was continually evaluated, and adapted if warranted, based on data received and analyzed each week. Changes were implemented, and the cycle was repeated for each program session.

The RE-AIM framework was also used for maintaining and disseminating the program. The guidelines recommended determining the most effective version of implementation, training others on the program, calculating any associated costs, disseminating the data from the program in community settings, making the program available to other targeted populations, and continuing to modify the program as needed for future replications.

Implementation Plan

Prior to implementation, the health-focused Bible study curriculum was created, edited, and printed into individual booklets for participants. Also prior to implementation, the project leader coordinated with the church ministry team to propose the best format, day, and time of the program. Guest speakers and activity leaders were intended to be arranged for various topics and the program was intended to be advertised at other local churches, the agriculture center, the health department, the farmers market, and any community-sponsored events.

Implementation was intended to begin in September 2020 with Sunday afternoon Bible study sessions. The six-week program consisted of relating scripture and Bible stories to common health topics including general health, heart health, agricultural health, mental and emotional health, healthy eating, and the importance of physical activity. Each session engaged participants through discussion and relevant activities. Following each session, participants were asked to complete a paper evaluation with a two-question Likert scale satisfaction survey as well as open-ended questions regarding areas for improvement. The data was analyzed after each session and the need for any changes was evaluated. Bi-weekly meetings were held with the faculty mentor and/or the church partner liaison to discuss successes and address any areas for improvement.

Timeline

The project team was arranged, and the program format was proposed and accepted by early August 2020. Following the acceptance of the plan, advertising began. The Bible study curriculum was created, edited, and printed by mid-August. The six-week project implementation was intended to begin the week following Labor Day. Throughout the semester, bi-weekly meetings were to be conducted to discuss project successes and set-backs.

Section IV. Results and Findings

Results

Following each weekly Bible study session, I measured the ease in which content was understood, the relevancy of the content, and the overall level of satisfaction from program participants. This quantitative data was collected through a post-session Likert-type scales which was completed by each participant. The survey also consisted of qualitative feedback in the form of suggestions for improvements.

The program was intended to include participation from additional church congregations, community partners, and local citizens. Total participation, and demographical material, was initially to be collected as crucial data. Secondary to COVID-19 restrictions, and the limitation of the program to only the implementation site's small church congregation, the program had very little participation. The program data collection method was modified to gather individuals' perceived satisfaction instead of the originally intended diverse demographics.

Expected Results

During the early stages of this project development, I expected to further implement the Bible study. I planned to advertise the program at local churches, community gatherings, and agricultural meetings to garner large, diverse participation. I initially expected to have at least 50 individuals participate in the Bible study program. However, secondary to COVID-19 and the resulting restrictions, I was hopeful to have at least 10 congregational members participate in the six-week Bible study. Prior to implementation, I was hopeful have full participation in the post-session surveys and have at least 75% of the participants report overall satisfaction scores as either satisfied or very satisfied. I also hoped to have at least 75% of the participants agree or strongly agree that the content was relevant and easy to understand.

Actual Results

Each participant completed the weekly post-session surveys, so there was a 100% completion rate. Participation, listed by each Bible study session in Table 1, was informally recorded at each session and ranged between 8 and 15 adult participants. At least 5 participants came to all sessions. The average attendance was 10.17 participants. The session about heart health drew the most attendance with 15 participants.

Table 1

Participation Listed for Each Bible Study Session

Session	Number of Participants
1. What is health? Honoring God with our health	**10**
2. Heart Health: A physical and spiritual heart checkup	**15**
3. Agricultural Health: Self-screening tools and Bible lessons from the farm	**10**
4. Mental Health: Self-screening tools and casting our burdens to God	**10**
5. Healthy Eating: Living as the body of Christ	**8**
6. Physical Activity: Get moving! In health and faith	**8**

As expected, the survey results yielded high marks. Overall, 100% of the participants either agreed or strongly agreed that the content of each session was easy to understand and relevant. Additionally, 100% of the participants were either satisfied or strongly satisfied with

the overall program. Suggestions for improvements, the qualitative data collected, included more interaction and activities within the sessions, providing healthy snacks at each session, and creating a recipe book from participants' healthy recipe ideas. Additionally, participants suggested that future sessions have more information about the mental health crisis and cancer, specifically its impacts on families.

Outcomes Data

I gathered data on the number of participants in each Bible study, all of whom completed the post-session surveys. Quantitative data was gathered regarding the ease in which content was understood, the relevance of the content to the participants, and level of overall satisfaction. Qualitative data was gathered in the form of suggestions for improvements, or suggestions for health topics in future Bible studies. Suggestions for more interaction during the sessions prompted me to think of socially distanced activities to include in the sessions such as: adult coloring pages for stress relief, participants sharing their families' healthy recipes, guided meditation sessions using a mobile application, and a guided exercise session.

Process Measures and Outcome Measures

The 36-page Bible study curriculum was created using Pages, Apple's version of Microsoft Publisher. Bible study books for each participant were printed and bound at Staples. Other process measures included pen and paper Likert-type scale surveys for data collection and Microsoft Excel to record and analyze data.

The quantitative and qualitative data collected from the individual sessions served as the outcome measures. Further demographic data collection may have yielded more overall outcome measures.

Discussion of Major Findings

The modified program yielded high-quality overall results. Due to the COVID-19 pandemic, I do believe there were gaps present during implementation. Data may be skewed due to the small population sample, and future programs may yield other results. I plan to lead this Bible study again post-pandemic with my initial implementation plans.

Section V. Interpretation and Implications

Cost Benefit Analysis

Projected Organizational Cost

The development of the project was the most time consuming and costly portion. The creation of the Bible study involved many months of determining relevant health topics, researching health guidelines, and delving into scripture and Bible stories. Following the completion of the curriculum, there was a financial cost to have the curriculum printed and bound into books for the participants. Since the curriculum now exists, if the project was to be replicated, an organization would have to fund the printing and binding of individual books by an office supply store. A leader's guide would also need to be specifically developed if non-healthcare related individuals were to lead the program, which would entail hiring a health care provider or finding a volunteer to create a leader guide.

The actual Bible study discussion portion provided to the participants would be low in cost as it can be presented in-person or through a virtual program. However, if the program was fully implemented with offerings such as healthy snacks, guest speakers, stress relieving activities, an exercise class, and/or creating a class recipe book, the organization should allocate associated costs and stipends. This project can be implemented at little to no cost to the organization but can be as expensive as the organization plans. The wide range of implementation options makes this a very cost-effective program for churches and community groups of all statuses.

Organizational Benefits from the Project

While the project would not necessarily produce income for the organization, it will provide a ministry to individual congregations and interested community groups. The project is

likely to provide motivation for participants to form health accountability groups with like-minded individuals to help improve their health or reach their personal health goals. It may also energize service initiatives within the church and improve the education and wellbeing of the surrounding community.

From the viewpoint of the United Methodist Church as an entity, faith communities should care about health outcomes. The health committee for the North Carolina Conference of the United Methodist Church brainstorms ways to improve health of congregations. If shared with the committee, this program can reach many individuals on a broad scale. While the health committee consists primarily of laity and cannot measure specific health outcomes, it does acknowledge the leading diseases affecting our congregations across North Carolina. While this program can be offered at a local level to impact the individual community, it can also be offered widespread as a primary prevention Bible study program to combat leading preventable illnesses across the state. If more primary prevention education is shared, perhaps less secondary and tertiary interventions will be needed, and fewer resources will be needed from the health committee across this conference of the United Methodist Church.

Unexpected Negatives and Organizational Return on Investment

The glaring unexpected negative encountered during this project implementation has been the COVID-19 pandemic. The program was not implemented to the fullest extent due to restrictions, which made it less interactive and less interesting. However, by modifying the program and eliminating several interactive elements, less time and financial resources were spent by me and the church.

Generally speaking, even post-COVID-19, an unexpected negative encountered may include the lack of a knowledgeable leader. Although there is a Bible study component to this

program, which many church members may be able to teach, it is also meant to serve as a health education tool. Without having a leader confident in health knowledge, churches and groups may be wary of the program.

The individual congregation members invested their time and energy in participating in this program. While the project was not able to be fully implemented, I believe the participants had a positive return on their investment. The program not only led discussion of health topics and a Bible study each week, but it also allowed for visioning plans. Individuals were able to brainstorm ways to improve their own health, and the group was able to think of ways to become more involved with community service, community health initiatives, and how we should be living as Christians. Additionally, participating in this program also allowed the congregation members to get to know, and build a trusting rapport, with me, their new pastor's wife.

Resource Management

Resources Available for Success

The program occurred in the large fellowship hall at the local church. This was a crucial resource for the success of the program. The large space allowed for participants to sit socially distanced without further COVID-19 restrictions. If COVID-19 had not been a concern, the large space likely would have allowed for at least 100 participants. Unfortunately, the congregation does not use the space very often. Throughout this program, the group envisioned ways to offer the space for community events or service initiatives such as a car seat safety check location on specific days, hosting blood drives, helping package meals for the local shelter, and much more.

Resources Needed but not Available

After realizing the impact that COVID-19 would create on the project implementation, plans for finding guest speakers had to be eliminated. Unfortunately, while there are a few

registered nurses in the congregation, there were no other professionals that could have assisted with this program. Had there been other professions such as agriculture extension representatives, dieticians, or physical therapists who worshiped with this congregation, I likely would have asked them to help lead specific sessions.

Additionally, the program could have been expanded at least to others in the congregation if participants had felt comfortable with using virtual meeting spaces. While there was a good amount of participation in terms of a small church Bible study, a few older members of the congregation did not feel comfortable meeting even socially distanced and with wearing masks. If they had felt comfortable enough with technology to join the sessions virtually, the program may have impacted more people. Overall, the impact of COVID-19 and the inability for large in-person gatherings in-person led to, in my opinion, a decrease in participation.

Feasibility of Re-Allocation of Resources

With the current pandemic, I do not foresee the benefit of re-allocating resources and hosting another small group Bible study. While the program did provide benefit at the time, likely the same individuals would participate again and would prove to be redundant. However, I do believe that once the pandemic is over and restrictions have been lifted, it is very feasible to allocate resources to implement this project to its fullest extent. If I were to ask the church to support this program and health ministry, a committee at the church would need to review and approve a proposal and all associated costs of activities, events, and guest speakers.

Implications of the Findings

Implications for Patients/Population

Throughout this Bible study, many participants reported being thankful for health education. While most of the attendees had opportunity and means to have regular doctor's

appointments, several mentioned that they have never been offered in-depth health education. This education, combined with self-screening tool results, prompted at least three participants to schedule appointments with their health care providers to discuss questions or concerns about their health.

This Bible study has enabled and will continue to prompt participants to see their health in a new light. Instead of just viewing health from society's standpoint, which is so heavily focused on doctor's appointments, medications, and disease processes, participants will hopefully start to view their health from a Christian perspective. By viewing themselves the way God does, participants may start to think of themselves differently; not only in improving their physical health, but also in how they care for themselves and others mentally, emotionally, and spiritually. As a Christian, improving health does not just mean our own bodies. We are called to break barriers and care for our neighbors and communities near and far.

Implications for Nursing Practice

While this project is not a typical health program, it is very relevant in today's practice. There are a lot of barriers to healthcare in eastern North Carolina, and a great need to help our neighbors. Nurses are called to serve others, to go where help is needed. Unfortunately, that call is most commonly answered in a hospital or health care facility. There is so much more work to do in community settings to improve individuals' health and wellbeing. Healthcare and Christianity are very similar in that manner. It is not common in today's society to see full churches on Sunday mornings, see children and families attending Sunday School or Bible studies. Instead of relying on buildings and familiar and comfortable practices, Christians are called to go out into the world and serve others, to go where help is needed.

This project was initially intended to serve the larger community in a nontraditional format. While necessary modifications were made secondary to COVID-19, the traditional Bible study format allowed participants to learn, discuss, and focus on the various types of health. The visioning process, which was made possible by the unexpected changes, will hopefully prove beneficial for individuals' growth and participation in future services to improve the health and wellbeing of our neighbors and communities.

Impact for Healthcare System(s)

Churches are not typically associated with health care or health care systems. However, this program was targeted, created, and implemented in eastern North Carolina with the hopes of combating the most prevalent health issues in the area. It makes sense to form a community partnership with health organizations, whether through large health systems or local health departments. Churches and their congregations should be known in community settings for their involvement in service activities and witnessing. Churches can easily partner with community events such as community health fairs, volunteer efforts with vaccination clinics, blood drives, and other health initiatives.

The more organizations involved with health education and improving health and overall wellbeing, the more reach and impact those improvements will have. The more primary prevention that is taught in the community setting, hopefully, the healthier communities will become. The more improvements in overall wellbeing, the less need there will be for secondary and tertiary interventions, and less strain there will be on the healthcare system, which will prove to be timesaving and cost effective.

Sustainability

This program is very sustainable, particularly if widespread across the state into other churches and communities. Although I am the leader of this project, someone knowledgeable of health and disease prevention can easily lead this again with a leader's guide. Additionally, a health professional and faith leader may lead the program together, each offering expertise in their own fields. The local church is already interested in hosting this program again, post-Covid, with the full implementation plans, advertising, extra activities and guest speakers, and community involvement.

Dissemination Plan

This research and project will be shared at the Virtual Doctorate in Nursing Practice Project Presentation day for East Carolina University's College of Nursing in April 2021. The program will also be shared virtually with the North Carolina Conference of the United Methodist Church (NCCUMC) Health Committee, which consists of pastors, retired healthcare professional laity, other laity interested in improving health and wellbeing of congregations, and a hospital chaplain.

This program will be implemented again to the fullest extent post-COVID-19. Following that implementation, evaluation and analysis, the curriculum will be edited for a final time and a leader guide will be created. The final edition, primarily the Bible study portion of the program, will have input from faith leaders. Although I will no longer be a DNP student at that time, I will be a healthcare professional and plan to still be a member of the NCCUMC Health Committee. When the curriculum is finalized to my best ability, I plan to present the project, curriculum, and leader guide at the NCCUMC Annual Conference, a yearly convention held in Greenville, North Carolina. The long-term hope for this project is that it wraps throughout Methodist churches in

the NCCUMC, or at the least becomes offered as a one-day health promotion Bible study program throughout the individual districts in the NCCUMC.

Section VI. Conclusion

Limitations

The COVID-19 pandemic and resulting restrictions were the largest limitations during this project. Not only did the pandemic present its own health and safety challenges, it also posed limitations on actual participation in terms of total numbers of participants and eliminated the possibility of guest speakers and more interactive elements.

Another limitation I found during this project was my own lack of Biblical knowledge. Although I was raised in church, attended Sunday School and Bible studies, and participated in youth group, it was intimidating to lead a Bible study for other adults all older and more knowledgeable than me.

Recommendations for Others

Planning

For replication, I recommend beginning the process by determining which health topics are most relevant to the specific target population. Research and gather health-related content prior to starting the exegesis, or interpretation of Biblical text. Work with faith leaders, teachers, pastors, and other experts to best interpret scripture relevant to the proposed topics.

Before creating the actual curriculum, meet with the project team to determine where, when, and how the program will be implemented. If the target audience is a younger, tech-savvy population, paper Bible study booklets may not be necessary. Additionally, if the program will be a single-day program with various stations instead of a multi-week program, the format of the curriculum will need to be modified. If the Bible study is a traditional format, create a curriculum that is easily divisible into the total number of sessions planned. After editing, have the curriculum books printed and bound or plan to distribute the curriculum virtually.

Planning will also consist of arranging any additional activities beyond the Bible study and health discussion. Suggestions for activities for this specific program include:

- Inviting health department representative to come and discuss community resources available to individuals and how to access them
- Inviting a therapist to come and lead meditation sessions
- Hosting a paint-by-number class (similar to the "Wine and Design" concept) as a form of relaxation
- Partnering with the local Agriculture Extension office to arrange guest speakers in the field of agriculture and advertising to the surrounding farming community
- Partnering with local nursing assistant programs, nursing programs, or high school health science class or club to come and check blood pressure measurements and/or random glucose monitoring
- Hosting a healthy covered-dish meal and create recipe books from participants' own healthy recipes, and
- Partnering with a physical therapist or personal trainer to lead exercise classes for the appropriate ages and mobility levels.

When all elements of the program have been arranged, plan to attend community events, festivals, health fairs, and meetings at other local churches to promote and advertise the Bible study program.

Implementation

Recommendations for implementation include meeting weekly or biweekly with the project team, which should include academic mentor, site champion, faith leader, and any other individuals essential to your project completion. These meetings will keep all parties informed

on progress, successes, and challenges. Throughout the project implementation, follow-up frequently with community partners and invited guests, meeting in person whenever possible. Additionally, the project leader and team should provide travel expenses and gifts for all guests and professionals, particularly if they are providing a volunteer service.

Evaluation

Evaluation methods should consist of quantitative and qualitative data. This project measured satisfaction, ease of understanding, and relevance, but the post-surveys can also measure demographics. Collecting demographical data may help customize the program for diverse populations. Post-surveys should be conducted after each session, whether they are weekly sessions or stations at a single-day event.

Following implementation, the project team should invite participants, guest speakers, and all other project partners to a post-implementation meeting. This meeting will provide everyone with the opportunity to voice opinions of the program and offer suggestions for overall improvements.

Recommendations for Further Study

Recommendations for further study into this topic and project include establishing a partnership with the local Agriculture Extension Office and other farming partners. Although the research was conducted for the target population to be eastern North Carolina farmers, this project did not reach many actual farmers. While many participants were retired farmers or had ties to family farms, only one full-time, active farmer attended any of the sessions. Pursuing involvement and advertising with the county Agriculture Extension office may provide more access to the target population.

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Appendix A

Project Literature Matrix

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Farmer, Currie, Kenny, Munoz	2015	An exploration of the longer-term impacts of community participation in rural health services design		*Journal of Social Science and Medicine*	To evaluate the effects of a community participation exercise about designing rural health care methods/services. What happened? What didn't happen? A follow-up study	Level III, reflective study, qualitative, descriptive	following up on community participation initiatives		22	interviews	original study participants, rural citizens, health care providers, community leaders/policy makers	lack of participation, since not many changes were implemented from the previous study, participants didn't have much trust in the process. Only 3 of the 4 originally studied communities allowed researchers back
Young, Willis, Stennule, Rodgers	2015	Localized health news releases and community newspapers: a method for rural health promotion		*Health Promotion Practice*	for health researchers to provide health education through newspaper articles: rural citizens are more likely to read and trust newspapers vs electronic apps and strangers	Level III, content analysis, regression analysis		Flesch-Kincaid grade level formula, Flesch Reading Ease test, IBM SPSS Statistics Version 19, Read program, US Census Urban-Rural Continuum Codes	252 newspapers were surveyed to determine rural/urban	email request	all newspapers in a rural, midwestern state in the US.	the researchers were able to provide 841 published health articles to 122 newspapers. More than half of the rural communities published at least 1 story. 78 newspapers that published articles were rural. Most common topics published were related to food and diet, cancer- including colorectal cancer screenings, mammograms, and skin cancer prevention, and flu. Although these articles seem relevant, the study, nowever, able to assess the community citizens
Zaycita	2015	Community trust and household health: a spatially-based approach with evidence from rural Honduras		*Journal of Social Science and Medicine*	individuals who trust their community and neighbors are more likely to be healthy; those who trust their community are more likely to participate in community-based health interventions	III, empirical analysis, spatial regression analysis		shoulder to shoulder, a nongovernmental health and development organization, census	2800 households, 16,000 individuals	telephone	rural, western Honduras	this doesn't actually evaluate a health intervention. It just determines a potential barrier to community-based health interventions. Your targeted population must trust the community and/or host in order to participate in interventions.
Graves, Hammer, Nikles, Wells	2015	Use of community-based participatory research toward eliminating rural health disparities		*Online Journal of Rural Nursing and Health Care*	To determine health needs in rural communities; most common health needs are cancer, diabetes, heart disease, chronic respiratory disease, accidents, and suicide; health insurance coverage, lack of education, lack of consistency in primary care, poor quality or insufficient health services, cost of health care, and lack of senior care were top concerns of the community	III, community based participatory research			774 individuals	telephone survey	rural, 70% female, 93% white, average age 57 yo, highest education level- high school or technical school, household income < 39,000	this study didn't evaluate actual interventions. It identified health needs and formed a committee to determine ways to combat those needs. The main results of the study surrounded the telephone survey response to identify needs
Conway, Favot, Hall, Ulrich, Palcher, Olinh, Teich, York-Jeune, Bianco	2016	Rural Health Networks and Care Coordination: Health Care Innovation in Frontier Communities to Improve Patient Outcomes and Reduce Health Care Costs		*Journal of Health Care for the Poor and Underserved*	rural residents health care can be improved through care coordination with a community care team. Healthier outcomes, less hospitalizations, less ED visits	Level V- program creation, community based participatory research, longitudinal study over 2 years		electronic health records	165 adults	telephone and in-person survey	18 and older, risk factors including overweight and obese BMI, smoking	$10 gift cards were provided to participants, targeted those already at risk- did not offer care coordination to other individuals
Brainard, Ford, Steel, Jones	2015	A systematic review of health service interventions to reduce use of unplanned health care in rural areas		*Journal of Evaluation in Clinical Practice*	reductions in health care use including ED were associated with preventative medicine, telemedicine, and targeting chronic illnesses.	level II, systematic review of RCTs and quasi-experimental studies			2708 articles, reports, and other documents	systematic review	rural, mention of a health care event, urgent adjective, RCT, case series, case control	this study was conducted in England, which may not correlate to my targeted area
Hoeft, Fortney, Patel, Unützer	2018	Task-Sharing Approaches to Improve Mental Health Care in Rural and Other Low-Resource Settings: A systematic review		*Journal of Rural Health*	technology is a way to provide rural areas with mental health specialists. Local providers can assist with education as part of the "task-sharing." important to note the study researched all kinds of task-sharing, including between community health workers, counselors, peers, community-based, church based, etc. not just telehealth	level I systematic review of RCTs			271 articles, reports, and presentations	systematic review	rural health, community mental health services, english language	most of the studies reviewed didn't have any element of experiment or implementation. They were just discussions

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/Level of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Size	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Carlisle, Farmer, Taylor, Larkins, Evans	2018	Evaluating community participation: a comparison of participatory approaches in the planning and implementation of new primary health-care services in northern Australia		*Int J Health Plann Mgmt*	community members were involved in planning and implementing oral health education and oral health promotion in community-based settings	V- design and implementation of program		PDSA framework, Rifkin et al's spidergram framework	27 people interviewed, 50+ attendees at sessions	interviews	those in rural communities targeted in Australia	the study wasn't very clear on the methods post-planning and wasn't very clear on what or how they gathered information
Johnston, Kondo, Ablah	2017	Building capacity among laity: a faith-based health ministry initiative	social-ecological model	*Journal of Religious Health*	Kansas Conference UMC developed a committee to target health initiatives in UMC congregations. Over 18 months the team trained congregation representatives on how to become more health conscious and create health conscious communities	V- designed and implemented and disseminated data			46 congregational team	workshops	UMC laity	does not provide specific demographics- ages, genders, rural/urban, barriers, socioeconomic status
Tagai, Scheirer, Santos, Haider, Bowie, Slade, Whitehead, Wang, Holt	2018	Assessing Capacity of Faith-Based Organizations for Health Promotion Activities		*Journal of health promotion*	utilizing organizational capacity like space, building, parking lot, experiences of congregants as ways to offer health promotion activities in anyway the church sees fit- Bible Studies, health fairs, farmers market, etc.	IV			34 African American churches	written surveys	church designee	while this study covered a broad category, it didn't elaborate on what exactly the churches did. It just mentioned what resources they had. Small sample size, limited to just African American population
Powers, Brock, Funderburk, Parmer, Strempler	2017	Multilevel Faith-Based Public Health Iniative in Rural Alabama, 2017		*Preventing Chronic Disease- CDC*	faith communities can be used to hold health education sessions and accountability groups	V- implemented program			737 adults in 14 faith communities	pretest and posttest	communities with high rates of obesity and low income	This was a 9 week session that only focused on healthy eating to control weight. It didn't tie into any faith-related aspects of health. It was soley a place to hold the sessions
Hemistad, Honeycutt, Flemming, Carvalho, Hodge, Escoffery, Kegler, Ashe	2018	Social environmental correlates of health behavios in a faith-based policy and environmental change intervention		*health education and behavior*	churches received grants to create a diet and physical activity program. Studied whether the social environment of the church contributed to healthy lifestyle vs unhealthy lifestyle	V- implemented program			6 churches	survey	18 years old, attended church at least monthly. One adult eligible per household	like other studies, didn't incorporate different levels of health. Could have used the opportunity to correlate spiritual health with healthy eating and physical activity. Limited to only church members
Koh, Coles	2018	Body and Soul: Health Collaborations with Faith-Based Organizations		*American Journal of Public Health*	churches join with pubic health initatives to promote annual flu vaccines	IV- review of programs			10 churches	not mentioned	geographically diverse- California- Massachusettes in underserved populations	
Wilcox, Saunders, Kaczynski, Forthofer, Sharpe, Goodwin, Condrasky, Kennedy, Jake-Schoffman, Kimard, Hutto	2018	Faith, Activity, and Nutrition Randomized Dissemination and Implementation Study: Countywide Adoption, Reach, and Effectiveness		*American Journal of Preventive Medicine*	churches were taught to develop, implement, and evaluate physical activity and healthy eating interventions through a community-based participatory approach. Trainings to make changes in their churches and offer ideas to participants. Almost half of the churches adopted the policies and changes to continue the interventions	III- nonexperimental study		RE-AIM Framework	1308 individuals, 59 churches	questionnaires	rural , medically underserved county in SC	only focused on healthy eating and physical activity, didn't provide any other demographics in actual participants, just the county demographics.
Tetley, Duran, Andersen, Boutin-Foster	2016	Evaluation of HeartSmarts, a Faith-Based Cardiovascular Health Education Program		*Journal of Religious Health*	Bible study was developed related to health promotion. 12 week Bible study/training to laity to learn basics of cardiovascular health program to take back to their congregations	V- program implementation			14 churches, 221 participants	pre and posttests	NYC, African American	not rural, only one race targeted, did not provide follow-up information about individual congregations

Authors	Year Pub	Article Title	Theory	Journal	Purpose and take home message	Design/Analysis/L evel of Evidence	IV DV or Themes concepts and categories	Instr. Used	Sample Site	Sample method	Subject Charac.	Comments/critique of the article/methods GAPS
Hankins-Moody, Yao	2019	Faithful Families, Thriving Communities: Bridging Faith and Health Through a State-level Partnership		*American Journal of Public Health*	9 week series of classes that challenges participants to think about how their spiritual and physical health are connected. Focused largely on healthy eating and physical activity	V- program implementation			41 churches, 941 respondents	pretest health assessments	North Carolina, African American congregations, Baptist	doesn't mention how they connected Bible and spiritual health. Limited in demographics, limited to physical health aspects