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# The Impact of Faith Community Nursing Programs for Chronic Disease Screening and Management in Vulnerable Populations: A Comprehensive Review of the Literature

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#### Introduction

Healthcare is becoming more complex and cost prohibitive, leading to a gap in accessibility for certain vulnerable populations, such as those lacking access to timely, quality care due to lack of insurance. An estimated 27.6 million individuals are uninsured in the United States (U.S.) (Kaiser Family Foundation, 2017). Lack of insurance, insufficient insurance coverage, complex health needs, and lack of accessibility may lead individuals to delay or forego medical treatment and preventative care services. These factors could lead to higher morbidity, poorer health outcomes, and more costly care due to the advanced disease state and complications present when care is sought (Bangurah et al., 2017). A faith-based screening and educational program for chronic illness, such as hypertension, would provide individuals access to health care services within their communities from individuals they trust.

## **Problem and Purpose**

The challenges facing healthcare are multifaceted; increased number of individuals without adequate insurance, chronic illnesses, multiple co-morbidities, and the population's increasing age have been identified as contributing factors. The U.S. population is aging; currently, 14.9 percent of the national population are 65 years or older (United States Census Bureau, 2017). The United States Census Bureau estimates that by 2060 one in four U.S. residents will be over the age of 65 (2017). This surge in older adults will make accessibility to healthcare more difficult and further strain the healthcare system. The typical older adults' medical spending is 2.6 times the national average and individuals over 65 years of age account for over one-third of U.S. healthcare spending (DeNardi et al., 2016). The primary reason for the increased medical costs for older adults is the management of chronic disease. For instance,

hypertension, one of the most prevalent chronic illnesses, has been estimated to cost the U.S. health care system over 131 billion dollars annually (Kirkland et al., 2018). Finding solutions in the community to provide screening, education, and management of chronic illnesses to populations with limited access to healthcare may improve health outcomes. Community resources can reduce costs by limiting the need for expensive acute and emergency care services.

According to the Institute of Medicine (IOM), increased access to high quality and timely health care leads to the best health outcomes; access to high quality, timely health care is difficult to obtain by individuals with insufficient insurance coverage or no insurance (IOM, 2011). Providing this level of care can be expanded by increasing the use of nursing roles outside of the acute setting such as primary care, transitional care, and community-based care (IOM, 2011). Faith community nurses (FCN) offers holistic, community-based care focused on mind, body, and spirit to communities, often benefiting underserved populations (Shillam et al., 2013).

Faith communities have cared for the sick throughout history and currently there are over 17,000 practicing FCN (Cooper & Zimmerman, 2017). Early healthcare addressed physical and spiritual needs simultaneously, with Florence Nightingale emphasizing the need to honor both the psychological and spiritual aspects of patient care to promote health (Macrae, 2001). However, as scientific knowledge increased, the focus of healthcare shifted to curing disease, with nurses' primary role identified as providing medically prescribed treatments (King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014). Care for the spirit, and the relationship between health and spirituality became less important, until recently. Partnerships between FCN and healthcare organizations are now considered a potential solution to providing timely, quality, and cost-effective care to certain populations.

#### Methodology

The purpose of this literature review was answering the research question "What is the impact of FCN programs on chronic disease screening and management". Positive health outcomes support the FCN collaborating with other healthcare providers to bridge the gap of access to health care, providing improved health outcomes in a cost-conscious manner.

The literature search was performed using EBSCOhost, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), and ProQuest. Keywords used in the search included faith community nursing and health outcomes and parish nursing and health outcomes. The search was broadened to yield more results and only included the key words of faith and/or parish nursing. Inclusion criteria included a peer-reviewed source, articles pertaining to the research question, resources written in the English language, and publication dates within 15 years. Duplicate articles were discarded, and articles were reviewed for relevance to the topic.

Fourteen articles were selected and appraised for rigor and evidence using the American Association of Critical Care Nurses (AACN) level of evidence rating. A grade of 'A', representing a meta-analysis or quantitative systematic review, 'B' representing control studies supporting an intervention, action or treatment, and 'C' representing a qualitative study, cohort study, case-controlled study, integrative review, meta-synthesis, or qualitative research was given to each analyzed article (Peterson et al., 2014). Each study was assessed including the author, year, study type, sample/setting, results, instruments, conclusions/recommendations, limitations, and the AACN's level of evidence, presented in **Table 1** (see Appendix).

#### **Critical Analysis of the Literature**

Patterns identified in the studies included the use of FCN to provide community-based care focused on chronic disease screening and management. The studies focused on either

hypertension (Baig et al., 2010; Bangurah et al., 2017; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Whisenant et al., 2014), diabetes (Austin et al., 2013), older adults (King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014; Rydholm et al., 2008; Shillam et al., 2013) and weight management (Kelley, 2018). The populations studied provided another theme in the research. Vulnerable populations and older adults were the populations of interest when determining the impact of FCN programs. The studies with vulnerable populations as the focus examined the effectiveness of FCN in impacting the health outcomes of populations identified as older adults, underinsured and uninsured individuals, racial minorities, and low-income individuals (Baig et al., 2010; Bangurah et al., 2017; Callaghan, 2016; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Koenig et al., 2016; Monay et al., 2010; Whisenant et al., 2014).

#### **Research Designs**

The literature analysis revealed that most of the research available pertaining to FCN is qualitative, or a combination of both qualitative and quantitative methodologies. Studies with a qualitative approach used surveys and questionnaires to determine a deeper understanding of the sample (Austin et al., 2013; Baig et al., 2010; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; King & Pappas-Rogich, 2011; Monay et al., 2010; Pappas-Rogich & King, 2014; Shillam et al., 2013). One study used randomization and blinding of the research assistances when comparing the blood pressures (BPs) of individuals visiting a faith community nurse and those receiving care through telephone-assisted physician appointments (Baig et al., 2010). This study was the only article found using a randomized controlled design approach for data collection and analyzation (Baig et al., 2010). This study contained the highest level of

evidence, of the articles analyzed, according to the AACN's level of evidence. While qualitative exploratory research is helpful in gaining an understanding of opinions and motivations, the qualitative research needs to be used to develop ideas for future, higher quality quantitative measurement of FCN's impact on the health outcomes of individuals. The tools used to measure the study variables included surveys and the measurement of vital signs, weight, and other diagnostic measures.

#### **Results**

#### **Populations**

#### **Vulnerable Populations**

A common population of interest in the studies analyzed for the literature review were vulnerable populations. Of the studies included in the literature review, six out of nine included vulnerable populations. Vulnerable populations identified by the studies included racial and ethnic minorities (Austin et al., 2013; Baig et al., 2010; Monay et al., 2010), individuals with lower socioeconomic status (Austin, et al., 2013; Monay et al., 2010), under or uninsured individuals (Monay et al., 2010), older adults (King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014; Shillam et al., 2013), individuals lacking access to health care (Baig et al., 2010; King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014; Shillam et al., 2013; Whisenant rt al., 2014), and disabled individuals (Koenig et al., 2016). Faith community nurses and clinicians need to consider the impact of religious involvement on the adaptability of the caregivers to disabled individuals. Supporting the caregivers of disabled community members will improve the caregiver's mental and physical health which will impact the care that the disabled family member receives.

Populations identified as "vulnerable" are at increased risk for experiencing healthcare disparities and lower health outcomes (Baig et al., 2010) The studies looked at the impact of FCNs at providing care to underserved populations in their residing communities. Many of the studies considered the impact of a FCN program on decreasing healthcare disparities amongst individuals with hypertension, (Baig et al., 2010; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Monay et al., 2010; Whisenant et al., 2014) and diabetes (Austin et al., 2013).

#### Older Adults

The literature review revealed that FCNs commonly care for older adults. The studies with older adults as the sample were included in the literature review due to the identification of underinsured or uninsured older adult participants in the studies. Insurance status is directly related to the health outcomes of older adults. Research has shown greatly increased mortality among uninsured older adults when compared to their privately insured peers (McWilliams et al., 2004). The accessibility difficulties faced by older adults and the fact that by 2050 the United States population will include 71.5 million individuals 65 years and older, makes this an ideal patient population to receive care from FCNs (Rydholm et al., 2008).

The studies analyzed focused primarily on older adults and looked at the relationship between FCN programs and their impact on the behavioral outcomes such as access to care, and medication adherence (King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014; Shillam et al., 2013; Rydholm et al., 2008). The results showed positive behavioral outcomes when FCNs and primary health care providers collaborated to provide care for older adults (King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014; Shillam et al., 2013; Rydholm et al., 2008). A study by Shillam (2013) showed positive impact on the behaviors of older adults regarding medication

when FCNs provided education and medication review. Rydholm (2008) examined the reasons that older adults postpone care possibly leading to negative health outcomes due to fear of being a bother to the physician, inexperience, or lack of knowledge regarding symptoms, and/or a desire for independence. FCN interventions to address postponing care address the physical or psychosocial barriers including lack of transportation or insurance, fear, or financial concerns.

Older adults delay medical care due to a lack of knowledge regarding signs and symptoms, stoic independence, or a reluctance to bother their physician (Rydholm et al., 2008). The postponement of care contributes to older adults presenting to health care providers at an advanced state of disease, leading to lower health outcomes and more costly care needed (Rydholm et al., 2008). Research supports that early intervention and education provided by FCNs to older adults and their caregivers can prevent potential injuries and illness from escalating (Rydholm et al., 2008).

Not every study showed correlation between FCN programs and the behavioral outcomes of older adults; however, the descriptive studies analyzed in the literature review support that the FCN model of practice, functions, and standards are promoting the health of older adults (King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014). Further research is needed to assess the impact of these interventions on the behavioral outcomes of older adults. The studies assessed all showed FCN programs to positively impact the behavioral outcomes of older adults (Shillam et al., 2013; Rydholm et al., 2008), or support that FCN programs are providing interventions which promote the healthy behaviors of older adults (King & Pappas-Rogich, 2011).

#### Chronic Illness

## Hypertension.

Studies conducted to determine the impact of FCN programs on health outcomes related to individuals' BP was a common theme of the research (Baig et al., 2010; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Whisenant et al., 2014). Blood pressure was a common measurement used to determine the effect of the FCN on the community's health outcomes. The studies which used BP to determine the program's impact on health outcomes showed statistically significant decreases in participants' systolic and diastolic BPs (Baig et al., 2010; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Whisenant et al., 2014). The impact of FCN programs on behavioral changes and hypertension management on individuals' health outcomes was a common theme of research. The studies analyzed found that individuals who participated in FCN programs self-reported behavioral changes that would result in improved health outcomes such as, dietary changes, medication intensification, increase in physical activity, and performing more preventative measures (Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Whisenant et al., 2014). African Americans are at increased risk for hypertension and a study sought to explore strategies and perceptions regarding black males towards a faith-based BP intervention. The study included 19 black men aged 18-50 years old who were interviewed by phone using predetermined questions and focus groups. The results of the qualitative study showed that the challenges of engaging young black men in health promotion interventions can potentially be impacted by FCN, taking into consideration church infrastructure, schedules, mentorship, and family networks (Carter-Edwards, et al., 2018). Bangurah et al., 2017) found that a 4-week diet and exercise intervention led by a FCN at an African American church decreased participants' BP and improved health behaviors during a

quasi-experimental study involving 16 African American adults aged 55 and older. Blood pressure readings decreased overall but change was not statistically significant due to the small sample size and short intervention time. Other significant changes included a decrease in participant self-reported intake of sodium, increased pace of walking and amount of physical activity.

#### Diabetes.

One study was included in the literature review focusing on FCN and diabetes screening, management, and education (Austin et al., 2013). A federally funded diabetes program, DefyDiabetes! was partnered with a FCN to conduct a study determining the effectiveness of a faith-based program on diabetes education and management. The study measured participants' BP, body mass index (BMI), self-care ability, and testing as recommended by their physician. There were 149 participants during the study. The program did not significantly impact participants BPs or BMI; however, positive health outcomes were shown through a statistically significant improvement in reported self-care, blood glucose testing, and testing as recommended by the participants' primary care provider (Austin et al., 2013). This is the only study that did not show a statistically significant change in the quantitative data; however, because there were statistically significant changes reported related to behavioral changes, the health outcomes of the participants ideally will be positively impacted.

#### **Discussion and Recommendations**

The results from this literature review suggest that FCNs are an asset to the healthcare system and could provide interventions to positively influence the health of vulnerable populations, older adults, and individuals with diabetes and hypertension (Baig et al., 2010; Bangurah et al., 2017; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Monay et al.,

2010; Whisenant et al., 2014). No studies were identified that specifically answered the research question examining the FCN impact on the health outcomes of under or uninsured individuals; therefore, studies including vulnerable populations as the focus were included.

Many of the studies' populations of interest referred to "vulnerable" populations, and the impact that FCNs can have on their health outcomes. These studies were included in the literature review because under or uninsured individuals are often considered a vulnerable population due to the causal relationship between health insurance and health care utilization and/or health outcomes (Freeman et al., 2008). Research has shown a causal effect of health insurance on the utilization and health outcomes in adults and that health insurance increases health care utilization and improves health (Freeman et al., 2008.). Individuals with health insurance showed increased use of physician services and preventative services, higher self-reported health status, and decreased mortality (Freeman et al., 2008).

Research also supports that FCNs can provide care and positively influence the health outcomes of older adults (Bangurah et al., 2017; King & Pappas-Rogich, 2011; Pappas-Rogich & King, 2014; Rydholm et al., 2008; Shillam et al., 2013), and populations with a diagnosis or a risk for diabetes (Austin et al., 2013) or hypertension (Baig et al., 2010; Bangurah et al., 2017; Cooper & Zimmerman, 2016; Cooper & Zimmerman, 2017; Whisenant et al., 2014). The interventions utilized by FCNs in the studies included preventative care, such as screenings, education, providing resources, caregiver support, and collaboration with other healthcare professionals. One study sought to determine whether FCNs could influence the health behaviors of nursing students and congregants of the church. This study found that FCNs could positively impact the health outcomes of individuals, particularly when a spiritual aspect was included in the self-care teaching (Callaghan, 2016).

Much of the evidence, however, is weak when graded using the AACN's evidence leveling system, due to the qualitative design of the studies. Findings from the literature review indicate that FCNs do provide valuable interventions to at risk populations, however, more quantitative data is needed to provide stronger measurable evidence. Limitations included that many of the studies attempted to measure behavioral changes, which are difficult to measure and require time to show a change (Dandridge, 2014), and the small, non-generalizable sample sizes of the studies.

Increasing awareness and the utilization of the FCN is raising educational expectations and opportunities. The scarcity of research on the impact of FCNs on vulnerable populations in the last 10 years is a limitation; providing more studies can bring confidence to other health care organizations considering collaboration with a faith community health provider. Ideally, FCNs would obtain more education to help expand research knowledge; however, due to financial barriers, as well as an older nursing workforce, this may prove difficult. Replicated successful interventions and the development of standardized tools and language would help FCNs to recreate studies and reinforce their value to the health care system.

The strongest theme in the research was the impact of FCN programs on individuals with hypertension. There were numerous mixed methodology studies that showed both a decrease in both systolic and diastolic BP measurements, as well as positive behavioral changes related to hypertension. The weakest theme in the research was the impact of FCNs on individuals with diabetes (Austin et al., 2013). There was one study available for analysis and the results showed only changes in behavioral outcomes; no statistically significant changes were seen with blood glucose levels or BMIs (Austin et al., 2013.). Further research is needed to evaluate the

effectiveness of FCNs on individuals with diabetes, specifically the impact of a FCN program on quantitative data such as blood glucose levels and BMI measurements.

Another population that may benefit from FCNs are individuals recently discharged from the hospital. Studies included in the literature reiterated the benefit of FCNs reviewing physician orders, providing clarification and education, and offering support to individuals and caregivers (Baig et al., 2010; Shillam et al., 2013). Providing these services to individuals recently discharged from the hospital could prevent the unnecessary use of acute care services and prevent readmission of the patient within 30 days, saving the healthcare system money and improving health outcomes of individuals.

#### **Conclusions**

Members of faith institutions have traditionally cared for the sick and poor within their communities. This practice has become its own specialty within nursing, known as faith community nursing. FCNs can offer their intimate knowledge of the community and collaborate with health departments, universities, community resources, and hospitals to provide holistic care for patients and families and provide interventions which improve the health outcomes of at-risk individuals in the community.

Studies from the literature support the notion that FCNs can improve behavioral outcomes in their congregants. They accomplish this through reinforcement and clarification of information provided by primary providers. Furthermore, they emphasize the importance of managing chronic illnesses, medication adherence and safety, and early screening and diagnosis of diseases. Results from studies also support that FCNs are effective at improving medical health outcomes, including improvement in measurements such as BP, and are a valuable

resource to individuals identified as vulnerable, including older adults. Future quantitative studies are encouraged to further show the impact of FCN interventions on the communities served.

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# **Appendix**

 Table 1 Studies Assessing the Impact of Faith Community Nurses on the Health Outcomes of Vulnerable Populations

Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Monay et al., 2010	To describe the services that FCN provide to patients living in the community with elevated B/P	Qualitative	A survey was measuring changes in systolic B/P, knowledge regarding hypertension, hypertension self- care participation, and medication intensification. There were no statistics included regarding interrater reliability or validity of the tool.	Participants were individuals with poorly controlled hypertension, B/P readings equal to or over 140 mmHg systolic or 90 mmHg diastolic. 67% (n=100) enrolled in the study. Participants were recruited from local nurse led church health clinics in the Los Angeles, California region.	The most common services to be provided by FCN include education to increase participation in self-management and lifestyle and behavioral changes to improve health. Each patient visited the nurse an average of 3.3 times. The most common nursing interventions provided to the individual included B/P measurement, diet education, counseling, and exercise education.	FCN can provide self-management support among populations with poor access to healthcare or other vulnerable populations. Self-management is critical for chronic illness management, including hypertension. Further research is needed to understand the impact of FCN interventions on improving health outcomes of at-risk populations with chronic diseases.	Findings may not be generalizable. Low internal validity due to some confusion of the nurses as to when the survey was to be conducted. The sample participants were randomly recruited from health fairs, meaning they may be more invested in their apt to seek and receive healthcare. Quality of Evidence: C
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Shillam et al., 2013	This study hypothesized that FCN involvement in Brown Bag Medication Review (BBMR) events during and following the even would lead to a reduction in medication related problems and improve medication self- care practices of older adults.	Pre-test/Post-test	A 12-item survey including given prior to the BBMR event, immediately following the event, and again at 3 months.	The BBMR event was held at an easily accessible hospital. The sample included 67 participants at the initial BBMR that met the inclusion requirements provided; member of a faith community; taking at least one medication daily (prescription, herbal, and/or over the counter)	The study showed a statistically significant decrease in the number of medications taken before the BBMR event and at the 3-month follow-up. At the BBMR event participants took an average of 9.7 +/- 5.1 medications daily. At the 3-month follow-up participants reported taking 6.7 +/- 5.5 medications daily (p<.001). Participants reported receiving important information regarding their	This study supports the hypothesis that FCN promote medication self-care in older adults.	Future results need to control and measure the delivery of FCN interventions more closely, attempt to recruit males and females equally, and engage participants to remain in the study for its entirety A limitation identified by the authors was the lack of control researchers had over what FCNs did with clients at the BBMR events and the follow- up. This study also had a small sample size and retention rate at the 3 months follow- up. This

					medications (14.3% at the BBMR event and 30.9% at the 3-month follow-up). 32% of participants reported changing their medication behaviors based on education received from the FCN.		study may not be generalizable due to the sample size being primarily female. Quality of Evidence: C
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Baig et al., 2010	To measure the effect of FCN referrals versus telephone- assisted physician appointments on B/P control among persons with elevated B/Ps at health fairs.	Randomized experimental study	BP measurements and recordings, and hypertension knowledge and self-care were measure by adapting the Michigan Diabetes Research and Teaching Center surveys from diabetes knowledge and self-care and knowledge to hypertension	A sample of 100 participants was used from 178 health fair participants, 18 years or older that had an average of the last 2/3 b/p readings equal to or over 140 mmHg or 90 mmHg diastolic. The study took place in Los Angeles, California where the health fairs took place in 11 different churches in the area.	The follow-up at 4 months was 85%. Patients assigned to the FCN referral showed a 7+/-15 mmHg drop in their systolic B/Ps compared to the physician telephone-assisted physician assigned participants which had a 14+/-15 drop in SBPs. The FCN referral group had a 27% increase in their medication intensification (defined as an increase in either the number of B/P medications or an increase in the dosage of given antihypertensive medications from recruitment to the 4-month follow-up appointment) compared to the 32% increase in the telephone-assisted physician group (p=0.98). Participants in the FCN referral was significantly more likely to report dietary and physical activity counseling as part of their care.	Both groups in the study showed statistically significant improvement in the participants' SBP and medication intensification; however, the telephone-assisted physician group showed more improvement. The results of this study show the benefit of collaborative care for patients. Nurses were effective in identifying patients with hypertension and providing interventions that resulted in positive health outcomes; however, more importantly FCN can play a crucial role in facilitating physician visits for patients and improving care outcomes even more. One of the barriers for low income and under or uninsured individuals is limited access to care, telephone visits with a physician seemed to be sufficient for participants to overcome barriers and receive care.	Some of the B limitations of this study includes that the findings may not be generalizable since the sample was recruited from health fairs, where attendees may have been more motivated to seek and receive healthcare when compared to the public. Also, the time frame, four months, may not have been sufficient for behavioral changes to occur. Self-reporting could have been influenced by social bias and not accurately assessed or reported. Quality of Evidence: B

Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Whisenant et al., 2014	This study evaluated the health benefits of two different faith-based health programs to determine if faith-based health promotion is effective	Pre-test/Post-test	Three measurements used by the study to determine effectiveness: weight, B/P, and an educational component. The educational component was developed by the researcher and focused on Biblical principles related to physical health. In the second church program a 12-week class was offered to participants. The participants had their SBP, DBP, HR, weight, waist measurement, cholesterol, and fasting glucose measured initially and again post program.	In the first church a convenience sample of 35 self-enrolled women from two rural Protestant churches. The second church's sample included a convenience sample of 15 women and 6 men from a metropolitan church.	For the first church, a total of 112 points was lost (n=30). As a group the reported SBP decreased by 7 mmHg and the DBP by 4 mmHg. At the 6-month follow-up (n=25) there was a reported 202-pound weight loss, an average decrease in the SBP of 10 mmHg, and a decrease in the DBP of 5 mmHg. At the conclusion of the study 10 participants reported weekly exercise class participation. The second church used paired-sample t-tests to identify the number of significant differences found between participants' pre and post 12-week measures. Improvements were seen in SBP, DBP, HR, weight, fat mass, waist, and hip size, as well as the serum levels of total cholesterol, triglycerides, low density lipoprotein, and high-density lipoprotein, and high-density lipoprotein. Independent t-tests were pre-formed to identify significant differences between male and female participants. The only significant differences between to females. Ordinary least squares regressions showed that age and sex explained a fair amount of variance in	This study's results support that faith institutions regardless of their resources can positively impact their congregant's health and engage in health promoting activities. FCN can act as resources, providing education and guidance for others to maintain or improve physical health.	Limitations for this study include size of sample and lack of diversity. There were no men in the first church's sample.  Participants from the second church were from a homogenous, middle-class population. Another limitation was the convenience sample of both studies. These limitations may not make the results of the studies generalizable to the public. Also, the results from the first church's study were self-reported and may have been inaccurate.  Quality of Evidence: C

					participants' heart rate measures (p=0.29).		
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Austin, 2013	Development of a program, Defy Living Diabetes! using The Chronic Care Model to teach Health Living classes in faith communities and monitor diabetes management in primary care offices. FCN conducted a 1-day training on the Healthy Living curriculum and held a 4-session class to individuals. After the group sessions, participants continued to meet monthly until the conclusion of the grant funding.	Pre-test/Post-test	Two surveys were used, the Diabetes Empowerment Scale and Summary of Diabetes Self Care Activities Measure- Short Form (SDSCA- SF). The Diabetes Empowerment Scale was modified and named the Health Empowerment Scale (HES). The HES measured whether participants felt empowered from the knowledge acquired from the Healthy Living classes and the SDSCA-SF assessed the diabetic individual's regimen of diet, exercise, glucose testing, foot care, and smoking. The Healthy Living classes were conducted at churches. Body Mass Index (BMI) and BP were measured.	Participants were recruited by FCN who routinely conducted BP and glucose screenings at 6 faith institutions in New York state. A total of 149 participants completed the Healthy Living classes during 3 different sessions at different faith communities. Fall 2008 (n=71) Spring 2009 (n=42) Fall 2009 (n=36) Most of the participants were insured, Caucasian women between the ages of 65-74.	Participants' HES scores increased for all 8 items from pre-test to posttest; however, the only statistically significant finding (using independent samples test) was: - respondents' self-awareness of their ability to take care of their health and make healthy choices - What helped them to stay motivated to care for their health - Their awareness of positively coping with health stress Participants' SDSCA survey results showed that participants' pre and posttest increase for all 8 items asked in the survey. Participants with diabetes reported significant improvement in foot care, testing blood glucose, and testing as the physician recommended. When results of the BP and BMI measurements showed no clinically significant decreases.	Defy Diabetes! 's results support that FCN can positively influence the health outcomes of individuals of the elderly and those with chronic diseases. While the BP and BMI did not show statistically significant improvement; the education and behavioral changes that individuals reported would all potentially lead to health improvement. FCN can partner with other health care providers to reiterate education regarding health promoting behaviors and management of chronic illnesses.	Limitations for this study included that the sample represented a small convenience sample limited to one geographical location. The curriculum was developed based on the American Diabetes Association's recommendations without consideration of the participant's specific needs or culture. The participants may have desired to answer the questionnaire and survey positively, which may have influenced the accuracy of their answers. Another limitation was the lack of a control group to compare. Quality of Evidence: C

Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
King & Pappas-Rogich, 2011	Determine whether the faith community nurse model of community-based practice supports practices described by Healthy People 2020 and the scope and standards for FCNs.	Descriptive	Development of a "Parish Nurse Questionnaire" was developed to determine how frequently FCN practice interventions which address strategies mandated by the Health People 2020 Critical Health Indicators, the International Parish Nurse Resource Center functions of the FCN, the American Nursing Association's Scope and Standards for FCNs	Sample of 102 FCN. The sample age ranged from 44-72. All participants were female, and a majority (n=95) were Caucasian. Experience as a FCN ranged from 1 to 20 years. A majority were volunteers and worked 10 or less hours weekly. The FCNs were from 30 states and 15 denomination s. The highest level of education was a Bachelor of Science in nursing. The nurses were recruited at an international parish nurse symposium or through parish nurse list serves. The questionnaire was either mailed or administered face-to-face at the symposium.	The FCN was asked if and how often they performed 7 functions in relationship to the standards given to FCNs. The most cited weekly functions by the FCN were health counseling, referrals, and integration of faith and health. As for functions performed monthly health education, advocacy, and coordination of volunteers were the most highly cited functions. The function that was least cited by FCNs was facilitating support groups. Healthy People 2010 proposed 10 health indicators with accompanying health challenges. The FCNs were asked how often these indicators were initiated. The health indicators most highly cited on a weekly basis were promoting daily physical activity and promoting emotional health. Nutrition and health weight activities were most cited as monthly initiatives. Yearly FCN reported addressing smoking cessation, reduction/elimination of substance abuse, safety and violent reduction, healthy environments, and immunization promotion. Very few FCN implemented the	The FCN model of community-based practice guides the development of strategies to meet the standards described by Healthy People 2020 and FCN standards. By motivating individuals to act on at least one of the indicators described in Healthy People 2010 or described the FCN standards, the FCN can positively impact health outcomes of the individual. The impact of the FCN will strengthen if the FCN is part of a collaborative team approach, offering a resource to vulnerable populations in the community.	This study may not generalizable due to the lack of diversity of the sample.  Quality of Evidence: C

					indicator of promoting healthy and responsible sexual behavior.		
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Cooper & Zimmerman, 2016	The development, implementation, and evaluation of a Million Hearts program delivered by FCNs to address BP control and improve healthy lifestyle choices in the community.	A Pre-post design to measure blood pressure and lifestyle satisfaction scores. Quantitative measures were also used in a secondary data analysis of FCN on BP.	The Model for Health Blood Pressure measured changes in lifestyle using a self-rating scale.  Documentation including participant initials, gender, B/P at each session, a physician referral check box, lifestyle self- rating scores, and narrative comments by the FCN.	The initial sample included 51 individuals (n=51), 20 male and 31 females. 7 participants didn't meet the requirement to meet with a FCN three times. The setting for this study included various churches in Western Maryland.	An analysis of the pre and post self-rated lifestyle area scores reflected a statistically significant improvement in 6/7 lifestyle intervals based on 95% confidence intervals. 82% of participants showed a statistically significant improvement in their systolic and/or diastolic BP over the 3-month period. The average systolic bp decreased from 142 mmHg during the first month to 130 mmHg by the last measurement. The average diastolic BP showed a statistically significant decrease as well from 82 mmHg to 76 mmHg. Qualitative data collection by patient feedback at the conclusion of the program showed that participants appreciated the time and support that the FCN offered. The educations as well as the free bp monitor helped with accountability regarding their lifestyle and improvement goals.	This study showed a positive impact on health outcomes by FCN providing bp education and monitoring. FCN offered accountability and reinforced medication management of BP. Participants were empowered to monitor their own B/P and to speak to their physician if their bp regarding medication control and management of BP.	The generalizability of the study is limited due to the small sample size and the lack of demographic data. Also, there was no control group to compare outcomes with. The sample was convenient. Quality of Evidence: C

Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Rydholm et al., 2008	A state-funded study of the impact of FCNs on the health outcomes of older adults. The purpose was to identify access concerns facing community dwelling older adults and their caregivers, how FCNs take to address those concerns, and costs that might be avoided through the interventions and the observable differences of the nurses' actions related to quality of life.	Mixed; quantitative and qualitative	The Data, Interpretation, Action, Response, and Yield (DAIRY) tool was used to connect FCN interventions and theoretical cost savings. Nurses using the DAIRY tool either charted narratively, but most commonly by exception using 4 forms: Symptoms warranting immediate intervention; matters of self- care; functional concerns regarding living at home and adapting to disabilities; psychosocial and spiritual concerns	99 FCNs participated in the study, all practicing in Minnesota; and 76% (n=75) contributed notes on patients using the DAIRY data collection technique. The nurses were all women, Caucasian, and Christian most often between the ages of 55-65. There were 713 patients represented in the 1,061 notes, with most of the patient sample being women between the ages of 70-89.	Qualitative Analysis: The qualitative analysis showed that FCNs evenly dispersed their attention towards urgent attention, such as escalating medical concerns, functional support, including self- care help, and psychosocial and spiritual support. Quantitative Analysis: A quantitative analysis performed using SPSS showed that psychosocial- spiritual concerns were the predominant focus of the patient population. The second largest group pertained to concerning signs and symptoms or signs of escalating illness that could lead to disability or death.	For all the conditions the most common reason for older adults not addressing their medical needs early included a reluctance to bother their physician, a lack of knowledge regarding signs and symptoms, or stoic independence. The statistics show that the FCN may have saved the Medicare an estimated 3 million dollars by preventing potential injuries and preventing escalating illnesses. The results of the study support that FCNs significantly positively impact the health outcomes of older adults and caregivers while contributing to cost savings for individuals, government assistance, and private insurers.	Limitations of the study may include a lack of diversity among participants, both nurses and patients. There were no males, religions, or other races included in the study.  Quality of Evidence: C
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Pappas- Rogich & King, 2014	To describe the practice of FCNs, FCN functions and standards, identify Healthy People 2020 Leading Health Indicator being addressed by FCNs, and how the FCN model of community-based practice can support implementation of the Healthy People 2020 initiatives.	Descriptive	The Faith Community Nurse Questionnaire was developed and sent to 4 expert FCN to establish validity.	The convenience sample size included 247 FCN from the ages of 26-80, with a majority being between 51 and 71 years old. Respondents were mostly Caucasian (95%) and female (97%). The mean years of experience was 15 years and 92% of the FCN had received formal FCN education. 68% were volunteers and 38%	Results for the FCN functions portion of the survey showed that FCN most cited integrating faith and health and health counseling on a weekly basis. Monthly, FCN reported health education, referrals, advocacy, and coordinating volunteers as the most common functions performed. When looking at a FCN's role in supporting the Healthy People 2020 health indicators, FCNs accomplished promoting	FCN's actions support the FCN functions and standards, Healthy People 2020 health indicators, and the Scope and Standards of Practice for Faith Community Nurses. FCN can be encouraged to include topics such as sexual responsibility and promotion of healthy environments through education and the promotion of recycling.	Lack of diversity in the sample. Some confusion regarding the website offering the survey that may have resulted in fewer FCNs being able to answer the survey. Also, a few of the indicators were not well described in the study which may have led to FCNs answering based on their own perceptions. Quality of Evidence: C

				had obtained a BSN education. This was a national study delivered using Survey Monkey.	physical activity most frequently, on a weekly basis. Monthly FCNs promoted good nutrition and healthy weight as well as promotion of emotional health and wellbeing. Yearly FCNs most encouraged reduction or elimination of tobacco use and promotion of safety and reduction in violence. Promoting responsible sexual behavior, promoting healthy environments, and encouraging the reduction or elimination of substance abuse were the most common indicators not addressed by FCNs.  The survey showed that FCNs listed 43 different types of partnerships. The most common collaboration was with hospitals, hospital sponsored FCN programs, and local health departments.		
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Koenig et al., 2016	To examine the relationship between religious involvement and t the adaptability of women caring for family members with severe disability	Two-site cross-sectional study	Tools measuring religious involvement: Intrinsic Religiosity Scale (IRS), Belief into Action scale, Religious Support Scale, Negative, and the Brief Religious Coping Questionnaire Measuring caregiver adaptation, the Perceived Stress Scale, the Zaria Burden Interview, and the Center for Epidemiological Studies Depression scale	A convenience sample of 251 caregivers from Los Angeles California and North Carolina were assessed between May 2013 and August 2014. Each participant was caring for a chronically ill family member requiring assistance with at least one of six basic	Religious involvement of the caregiver was associated with increased adaptation independent of age, race, education, caregiver health, care recipient health, social support, and health behaviors. Older women, particularly those caring for a spouse and black caregivers showed a stronger association	Faith community nurses and clinicians need to consider the impact of religious involvement on the adaptability of the caregivers. Supporting the caregivers of disabled community members will improve the caregiver's mental and physical health which will impact the care that the disabled family member receives.	The convenience sample and the focus on female caregivers limit the generalizability of this study.  Quality of Evidence: C

			Social Support Questionnaire	activities of daily living	between religious involvement and perceived stress.		
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Callaghan, 2016	To report the implementation of faith community nursing interventions to promote health behaviors in adults using theoretical frameworks that direct the content and teaching strategies used to implement the programs	Quasi- experimental; pre and post test	Health Promoting Lifestyle Profile II instrument was used to measure pre and post intervention levels of healthy behaviors	Family Health Promotion Intervention: 11 participants able to speak and read English, able to care for self, age 14 or older, a member of the faith community, and able to attend with at least one other family member recruited from local churches. Nursing Student Health Promotion Intervention: 23 nursing students recruited from a local nursing school. Older Adult Promotion: 50 years or older living in an urban community senior center; 2 completed.	The outcomes measure for the family, student, and older adult interventions all showed a statistically significant change in the scores of the pre and post scores using the HPLPII instrument; indications that the participants' frequency of healthy behaviors increased.	Health promotion activities led by FCN can impact the likelihood of adults practicing healthy behaviors, particularly older adults especially when tailoring programs to fit the needs of their communities	Many of the participants were enticed with food and money; small sample size; convenience sample, all limiting the generalizability of the results Quality of Evidence: C
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Cooper & Zimmerman, 2017	Determine the effect of a faith community nursing intervention of B/P monitoring and coaching on B/P and lifestyle changes in the at-risk and hypertensive population and to perform a secondary data analysis of B/P readings and lifestyle satisfaction scores	A Pre-post design to measure blood pressure and lifestyle satisfaction scores. Quantitative measures were also used in a secondary data analysis of FCN on BP.	The Model for Healthy Blood Pressure measured changes in lifestyle using a self-rating scale. Documentation including participant initials, gender, B/P at each session, a physician referral check box, lifestyle self- rating scores, and narrative comments by the FCN. The program used was the CDC's Million Heart Program.	119 Congregants of local faith communities in Maryland, convenient sample with identified HTN or at risk for HTN and 39 FCNs	A total of 109 participants completed the program and were included in the analysis and were showing decreased B/P readings and improved lifestyle satisfaction scores in six out of seven areas across the program period.	This Million Hearts initiative can improve partnerships between faith communities, a health organization, and public health agencies. The FCNs in this project helped participants to meet health goals and learn skills of self-management to positively influence hypertension.	The study was short in length which does not address how well the interventions worked in long term disease management. The convenient sample, and sample size limits the studies generalizability. Quality of Evidence: C

Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Carter-Edwards et al., 2018	A pilot research study to explore strategies and perceptions for developing a faith- based B/P intervention for young black men	Qualitative	Phone interviews using predetermined questions and focus groups	19 black men aged 18-50 years old attending 2 urban churches in the southeast United States	The results from the phone interviews and focus groups led to identification of common themes such as a desire for health promotion activities to be integrated with other activities within the church's infrastructure to help with time management. Family involvement was important especially regarding changes to diet. Male leadership and mentorship were also identified as an incentive to participate in health promotion activities.	Challenges of engaging young black men in health promotion interventions can potentially be impacted by FCN and taking into consideration church infrastructure, schedules, mentorship, and family networks	Small convenient sample size and large churches with many resources limits generalizability to smaller churches with fewer resources
Authors, year	Purpose & Aims or Hypotheses	Study Design	Instruments(s)	Sample/ Setting	Results	Conclusions/ Recommendations	Limitations
Bangurah et al., 2017	Implementation of 4- week FCN led diet and exercise intervention to examine the efficacy of behavioral and lifestyle interventions (sodium restriction and increased physical activity) on HTN control	Quasi- experiment al; pre and post test	The Hill-Bone Compliance to High Blood Pressure Therapy Scale a validated tool, 14 item questionnaire was used to conduct pre- and post-intervention surveys to measure sodium intake behaviors. The Paffenbarger Physical Activity Questionnaire (PPAQ) was used to measure participants' pre- and post-intervention physical activity levels to determine the effect of physical exercise on BP control.	16 African American adults aged 55 and older attending a faith community organization in low socioeconomic area with limited public transportation.	BP readings decreased overall but change was not statistically significant due to the small sample size and short intervention time. The four significant changes were decreases in participants eating salty foods, eating fast food, increased pace of walking, and amount of daily physical activity.	Healthcare providers can improve health outcomes related to hypertension screening and management in African American populations by collaborating with faith communities.	Small, convenient sample size limits generalizability. Study replication recommended in other similar settings.

*Note.* Appraised for rigor and evidence using the American Association of Critical Care Nurses evidence leveling system; A grade of "A" representing a meta-analysis or quantitative systematic review, through "C" representing a qualitative study, cohort study, case-controlled study, integrative review, meta-synthesis, or qualitative research.