Urban-Rural Differences for Health Promotion in Faith-Based Organizations

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Abstract

Background: Rural faith-based organizations (FBO) serve an important social, cultural and political role in their communities, but compared to their urban counterparts, less is known about their ability to deliver health and wellness activities (HWA). This study's purpose was to examine differences in factors related to HWA between urban and rural FBOs.
Methods: A convenience sample of faith-leaders (N = 824) completed an online survey assessing faith leader demographics (age, sex, education, body mass index, race), FBO demographics (denomination, location), types of HWA, and barriers to HWA.
Results: Respondents were primarily White (93%), male (72%), middle aged (53.2± 12.1 yrs.), with Methodist (42.5%) or Lutheran (20.2%) affiliations. Compared to urban faith leaders (n=599), rural faith leaders (n=225) reported lower physical activity levels and higher rates of overweight (*p's*<0.05). Compared to urban FBOs, rural FBOs were more likely to report offering no HWA (χ^2=3.00, *df*=1, *p*=0.04), and rural FBOs offered fewer HWA (3.73±2.89) than urban FBOs (4.98±3.25; *t*=4.92, *df*=781, *p*<0.001). Urban FBOs offered more educational health classes, health fairs, health screenings, and physical activity/sports groups compared with rural FBOs (*p*s<0.05). Rural FBOs were more likely to report a lack of congregational interest and lack of lay leadership as barriers to HWA, whereas urban FBOs indicated that other FBO activities conflicted with HWA (*p*s<0.05).
Conclusions: This study revealed important differences in factors related to HWA in urban and rural areas. This study provides public health professionals with insight regarding implementation of HWA in rural and urban FBOs.

Keywords: Faith-based, Urban, Rural, Social Environment

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Approximately 50 million people in the United States live in nonmetropolitan areas, representing 17% of the total population (Cromartie, Parker, Breneman, & Nulph, 2011). Rural areas face significant challenges for healthcare and health promotion, including: lack of access to quality health services, higher chronic disease rates, less participation in healthy behaviors, greater poverty compared with urban areas and an aging rural population (Gamm, Hutchison, Dabney, & Dorsey, 2003). These health and health care inequities are not only relevant for acute medical care, but also for preventive health promotion programs needed to reduce the lifestyle risk factors for chronic disease such as physical activity, diet, smoking cessation and screening participation (The National Advisory Committee on Rural Health and Human Services, 2008). Chronic diseases such as cardiovascular disease, cancer and diabetes cost the United States (US)

economy billions of dollars annually (Devol & Bedroussian, 2007); however the risk of developing these conditions can be significantly reduced with lifestyle modifications.

Healthy People 2020 (U.S. Department of Health and Human Services [USDHHS], 2010) and the National Rural Assembly (National Rural Assembly, 2011) emphasize the importance of creating social and physical environments supportive of health and behaviors by engaging multiple community sectors for improved policies, practices and programs. Previous evidence has shown numerous benefits of partnering with community institutions e.g., schools, worksites faith-based organizations [FBOs] for health programming. Using a community-based approach enhances the likelihood of the program being accepted by the target population and increases the chance of sustainability (Bopp & Fallon, 2008; Minkler & Wallerstein, 2002).

It is important to note the benefits of partnering with FBOs to deliver health promotion interventions. In the US, 40% of individuals attend religious ceremonies one or more times a week, and an additional 20% attend services/activities 2-4 times/month(Pew Research Center, 2008b), affording a great amount of reach into the general population, across all racial and ethnic groups, age groups, and income levels. Health promotion interventions delivered within FBOs have great appeal for approaching underserved populations (DeHaven, Hunter, Wilder, Walton, & Berry, 2004) because they allow for more cultural tailoring, greater buy-in from community members, and a stronger potential for sustainability. Finally, faith-based efficacy and effectiveness trials show positive results across a wide variety of health conditions and behaviors (Bopp, Peterson, & Webb, 2012; Campbell et al., 1999; Lasater, Becker, Hill, & Gans, 1997; Lasater, Carleton, & Wells, 1991; Markens, Fox, Taub, & Gilbert, 2002; Sbrocco et al., 2005; Wilcox et al., 2007; Yanek, Becker, Moy, Gittelsohn, & Koffman, 2001). Despite the evidence for the effectiveness of health promotion programs in FBOs, there is limited evidence for the role of rural FBOs.

Approximately 18% of church attendees in the US report that their congregation is located in a rural area (Chaves & Anderson, 2008). The church is recognized as the foremost social institution for Americans residing in rural areas and has historically served as the setting for much of the faith-related and non-faith-related social interaction between members of the rural community (Bennett, 1957). For many rural dwelling persons, the church serves as an extended family, often providing social support services to the poor and elderly in the community (Boyd-Franklin, 1989). The prominence of the church in rural communities signifies the need to examine more thoroughly the role of rural FBOs in health promotion initiatives.

A recent study examining the beliefs of rural church leaders and members about health promotion provided insight into the expectations for churches to offer health promotion messages (Williams, Glanz, Kegler, & Davis, 2009). Consistent with other studies (Catanzaro, Meador, Koenig, Kuchibhatla, & Clipp, 2007; Demark-Wahnefried et al., 2000; Peterson, Atwood, & Yates, 2002), Williams and colleagues (2009) noted that the faith leader and their perception of health is extremely influential on the church health promotion environment, though there are a number of other social and physical environmental influences on church related health promotion programs. Kegler and colleagues (2010) examined the perceptions of social and environmental support for physical activity and healthy eating in rural southern churches and found a lack of existing programs and minimal advice from their faith leader on these habits; however social support from fellow church members for these behaviors was common. These studies suggest a more informal approach to health promotion in rural FBOs compared with more structured and formal approaches. Despite these few studies, there is a significant gap in the literature indicating the current status of health and wellness programming and possible

influences on offerings in rural FBOs throughout the country. According to organizational change theories (Butterfos, Kegler, & Francisco, 2008), the process of initiating health promotion programs within institutions begins with defining and recognizing the lack of preventive health programs before adoption or implementation of initiatives can take place. Therein, the primary purpose of this study was to examine the differences between urban and rural FBOs for health promotion programs and activities, including types of programs, barriers to programs, and parent organization support. The secondary purpose of the study was to examine differences between urban and rural faith leader health and behaviors.

Methods

An online survey system, Axio Learning Systems, Manhattan, KS, was used to conduct this cross-sectional study examining differences in health and wellness programming between urban and rural FBOs. This survey was approved by the Institutional Review Board.

Setting & Subjects

A convenience sample of faith leaders from across the US was recruited to complete the survey. Based on Pew Forum data (Pew Research Center, 2008b), we identified the top three most common religious denominations for each state. Subsequently, we searched for websites representing that denomination's state level organization/conference/diocese, allowing us to gather email addresses for primary faith leaders e.g. pastor, priest, secondary leaders e.g. associate pastors, and or general FBO contacts, resulting in 13,644 individual email addresses.

The data collection period was March-December 2009. Individuals were sent an initial email invitation requesting participation in "A Survey on Faith and Health", explaining the purpose of the anonymous survey, assuring confidentiality, and providing a link to the survey and informed consent statement. Two email reminders were sent two to three weeks after the initial invitation email. As an incentive to improve response rates, respondents were given a chance to enter a drawing for prizes at the end of the survey.

A number of initial emails were returned as undeliverable (n = 1468; 10.7%), resulting in 12,176 eligible respondents. In total, 1,012 people accessed the survey, and 844 individuals completed the survey (6.9% response rate from those who received the email invitation, 83.4% completion rate). It should be noted that this response rate is overly conservative, as the emails may have been diverted to spam or sent to defunct, but functioning email accounts.

Measures

Faith leader demographic and health information. Faith leaders reported their age, sex, racial/ethnic group, education level, their primary responsibility at the FBO e.g. primary leader, secondary leader, etc., if they were employed full or part time and the length of time they had been a faith leader. The Behavioral Risk Factor Surveillance System physical activity module (Centers for Disease Control Prevention, 2010) was used to determine if individuals were meeting current physical activity guidelines (Haskell et al., 2007). Participants also reported: a) the number of daily fruits and vegetables consumed, b) their chronic health conditions, and c) height and weight, for calculating body mass index. Perceived health status was assessed with a single item using a 5-point Likert scale, 1=excellent to 5=poor.

Faith organization information. Respondents reported their FBO's zip code, church/congregation size, racial/ethnic diversity of the congregation, and religious affiliation. Zip codes were matched with region, states and counties and the county's Rural-Urban

Continuum Code (RUCC) was assigned and categorized as urban/metropolitan (RUCC codes 1-5), rural/non-metro (RUCC codes 6-9) (Nance, Denysenko, Durbin, Branas, Stafford, & Schwab, 2002; U.S. Department of Agriculture, 2008).

Health and wellness activities (HWA). Participants reported their FBO's health-related activities in the past year. These were classified as either action-oriented programs: clubs/teams related to physical activity, individual counseling about health, educational classes about health, screenings for health conditions, hands-on instruction about health, group counseling about health, or health fairs or providing educational materials such as health pamphlets, bulletin boards, inclusion of health and wellness information in church materials, health library, instruction about health and wellness as a part of other church classes. A sum of these materials and activities was calculated as the number of health and wellness activities (HWA). The faith leader was also asked to report their role in initiating or organizing the action-oriented programs by selecting one of the following options: a) initiated and overseen by myself, b) initiated by myself and overseen by others, c) initiated by others and overseen by myself, or d) initiated and overseen by others. Leaders that indicated one of the first three options were considered to be involved in the activity.

Barriers and facilitators to faith-based health programming. Participants used a 5-point Likert scale, 1=not a barrier at all to 5=a very large barrier, to indicate whether barriers influenced HWA. The six barriers we inquired about were based on other literature in the field about common barriers to health in FBO and included: a) lack of financial resources, b) lack of interest, c) lack of lay leadership, d) leadership does not believe that health and wellness should be addressed at the FBO, e) competition for time and space with other institutional activities. From their responses, a summary score was created ranging from 6 - 30. We also asked participants to indicate (yes/no) whether various factors would be useful for motivating the FBO to increase HWA: a) additional trainings, b) financial resources, and c) interest/awareness from congregation. The development of the list of barriers was based on findings from previous faith-based studies that have indicated common barriers to delivering programming (Campbell et al., 2007; Peterson, et al., 2002).

Perceived health concerns of faith institution. Faith leaders were asked to select what they perceived as the top five health concerns for members of their FBO from a list that included several chronic diseases and conditions, e.g. heart disease, cancer, diabetes, stress and special populations, e.g. child or maternal health.

Analysis

Basic descriptive statistics and frequencies were used to describe the sample. Differences between urban and rural FBOs were examined using t-tests and χ^2 analyses. All statistical analyses were run using the Statistical Package for the Social Sciences, version 17.0 (SPSS, Chicago, IL) and significance levels were set at p=0.05.

Results

Sample Characteristics

Table 1 provides the characteristics of the sample. Participants (n = 824) were primarily white, male, middle-aged, and serving as the primary (72.9%) or secondary (17.8%) leader at their FBO. Respondents most often reported that their FBO was affiliated with Methodist (41.1%) or Lutheran (20.4%) denominations. For the purposes of comparison, denominations

were collapsed into the top five categories: a)Methodist, b) Lutheran, c) Catholic, d) Baptist, and e) United Church of Christ/Congregational while the remaining denominations were placed in an "other" category Episcopal (n=16), Church of Christ (n=6), Free Evangelical (n=15), Assembly of God (n=2), Non-denominational (n=7), Jewish (n=5), African Methodist Episcopal (n=1), Presbyterian (n=14), Christian (n=1), Church of the Nazarene (n=3). An examination of FBO characteristics revealed that faith leaders were primarily affiliated with medium sized institutions (100 - 500 members), with little diversity (> 90% white) and located within the Midwestern US. Based on zip codes, participants were categorized as either rural FBOs (n = 225) or urban FBOs (n = 599).

Faith Leader Differences

Characteristics of faith leaders are displayed in Table 1. Urban faith leaders were more likely to meet current physical activity recommendations ($\chi^2 = 3.13$, $df = 1$, $p = 0.04$) compared with rural faith leaders. Rural faith leaders were more likely to be overweight or obese ($\chi^2 = 16.89$, $df = 2$, $p < 0.001$) compared with their urban counterparts. Urban faith leaders were more likely to perceive that they were in excellent/very good health ($\chi^2 = 4.24$, $df = 1$, $p = 0.02$). There were no urban-rural differences for age, gender, fruit and vegetable intake, number of chronic health conditions, amount of health and wellness instruction in school, or years of service.

Table 1

Characteristics of faith-leaders and faith-based organizations (N = 824).

	Rural FBO (n=225)		Urban FBO (n=599)	
	Percent (%)	Mean (SD)	Percent (%)	Mean (SD)
Faith Leader Characteristics				
White/Caucasian	93.9		91.6	
Male	72		73.9	
Employed Full-time at FBO	78.6		77.4	
Primary Faith Leader at FBO	82.1		69.8	
Age (years)		54.00 (13.32)		53.19 (11.67)
Number of Years Serving FBO		16.30 (12.70)		17.53 (12.69)
Number of Chronic Health Conditions		1.36 (1.44)		1.20 (1.33)
Perceived Health Status*				
Excellent	6.60		15.6	
Very Good	43.40		42.6	
Good	41.00		32.7	
Fair	9.00		18	
Poor	0.00		1.1	

Physical Activity[a*]		
Meets Recommendations	57.20	64.3
Does Not Meet Recommendations	42.80	35.7
Fruit and Vegetable Consumption[b]		
Meets Recommendations	41.50	45.3
Does Not Meet Recommendations	58.50	54.7
Body Mass Index, kg/m^{2*}		
Healthy Weight (18.5-24.9 kg/m$^{2)}$	12.10	25.5
Overweight (25-29.9 kg/m$^{2)}$	39.30	36.8
Obese (>30 kg/m^2)	48.50	37.7

Faith-based Organization Characteristics

Number of Health & Wellness Activities (HWA)*	3.72 (2.90)	4.97 (3.26)
Barriers to HWA, summary score*	17.73 (4.81)	16.90 (4.58)
Parent Organization Support for HWA	10.38 (3.56)	10.36 (3.13)
Religious Affiliation		
Methodist	54.	36.9
Lutheran	10.7	13.9
Catholic	8.	12.7
Baptist	16.1	22.1
United Church of Christ/Congregational	1.8	6.2
Other	9.4	8.2
Church Size*		
Small (<100 members)	29	16.4
Medium (100-500 members)	51.3	41.3
Large (501-1000 members)	10.3	15.9
Very large (>1000 members)	9.4	26.3
Diversity of Congregation*		
< 50% White	7.6	9.5
50-89% White	6.7	24.4
>90% White	85.7	66.1
Region of the United States		
Midwest	79.1	65.7
Northwest	0.01	2.9
Southeast	11.5	11.
Southwest	4.4	7.3
Northeast	0.4	14.2

Note: [a] Physical Activity Guidelines Advisory Committee (2008), [b] U.S. Department of Agriculture (2005). * indicates a significant difference between rural and urban

Faith-based Organization Differences

FBO organization characteristics are displayed in Table 1. Rural FBOs were more likely to be smaller, (χ^2 = 41.1, *df* = 3, *p* < .001), and less diverse (χ^2=35.01, *df* = 2, *p* < .001), compared with urban FBOs. Compared to urban FBOs, rural FBOs were more likely to report offering no HWA (χ^2 = 3.00, *df* = 1, *p* = .04). Rural FBOs offered fewer HWA (3.73 ± 2.89) than urban FBOs (4.98 ± 3.25), (*t* = 4.92, *df* = 781, *p* < .001). There were no differences in parent organization support between urban and rural FBOs.

Details of health and wellness activities are displayed in Table 2. An examination of action oriented activities revealed that urban FBOs were more likely to offer educational health classes (χ^2 = 16.81, *df* = 1, *p*< .001), hands-on health classes (χ^2 = 6.57, *df* = 1, *p* = .006), health fairs (χ^2 = 14.95, *df* = 1, *p* < .001), health screenings (χ^2 = 23.25, *df* = 1, *p* < .001), group counseling for health (χ^2 = 5.85, *df* = 1, *p* = .009), and physical activity groups/sports (χ^2 = 26.58, *df* = 1, *p*< .001), compared with rural FBOs. Urban FBOs were also more likely to offer a number of educational materials compared with their rural counterparts: a) bulletin board related to health and wellness (χ^2 = 13.56, *df* = 1, *p* < .001), b) health related pamphlets/leaflets (χ^2 = 5.94, *df* = 1, *p* = .009), and c) health/wellness instruction as a part of other FBO classes (χ^2 = 6.37, *df* = 1, *p* = .005) were more common in urban compared with rural FBOs. Urban faith leaders reported that the top five health concerns for the congregation were: a) heart disease, b) cancer, c) diabetes, d) stress and e) depression; while rural faith leaders reported that: a) heart disease, b) cancer, c) diabetes, d) arthritis and e) obesity were the main health concerns at their FBO. Analyses by congregation size, denomination and diversity are found elsewhere (Bopp & Fallon, in press).

Table 2
Frequency of health and wellness activities by location.

	Rural FBO (n=225)	Urban FBO (n=599)
	n (%)	n (%)
Educational materials		
Health/Wellness Pamphlets/Leaflets	95 (42.2)	310 (51.8)*
Health/Wellness Bulletin Boards	59 (26.2)	240 (40.1)*
Health/Wellness Materials Included as a Part of FBO Materials	59 (26.2)	179 (29.9)
Health/Wellness Library	39 (17.3)	109 (18.2)
Health/Wellness Instruction/Curriculum as Part of Other FBO Classes	26 (11.6)	115 (19.2)*
Action-oriented activities		
Clubs/Teams or Physical Activity Groups	87 (39.9)	348 (60.3)*
Individual Counseling for Health/Wellness	117 (53.4)	317 (55.2)
Health/Wellness Education Classes	77 (35.0)	295 (51.2)*
Health/Wellness Screenings	70 (32.1)	296 (51.2)*
Hands-on Classes	69 (31.4)	238 (41.2)*
Group Counseling for Health/Wellness	64 (29.2)	221 (38.4)
Health/Wellness Fair	37 (17.0)	178 (30.6)*

FBO: Faith-based organization Note * indicates a significant difference in frequency of offering between rural and urban FBOs

Barriers and facilitators to HWA are displayed in Table 3. Rural FBOs reported a greater number of barriers to HWA (t = 2.26, df = 801, p = .02). A lack of lay leadership or volunteers was more likely to be reported as a barrier for rural FBOs compared with urban institutions (χ^2 = 6.32, df = 1, p = .007). In urban institutions, a lack of financial resources for staff time was frequently reported as a barrier compared with rural FBOs (χ^2 = 3.98, df = 1, p = .03). Rural FBOs were more likely to indicate that a lack of interest from the congregation in health and wellness was a barrier (χ^2 = 10.05, df = 1, p = .001), and urban FBOs more frequently reported that competition for time and space with other FBO activities was a barrier (χ^2 = 7.87, df = 1, p = .003). Both rural (68.4%) and urban (66.4%) leaders frequently reported that increased health and wellness interest/awareness from congregation members would motivate their FBO to offer more HWA.

Table 3
Frequency of barriers and facilitators by location.

	Rural FBO (n=225)	Urban FBO (n=599)
	n (%)	n (%)
Barriers		
Lack of Lay Leadership/Volunteers	124 (55.6)	267 (45.7)*
Lack of Financial Resources for Staff Time	103 (46.6)	278 (47.8)*
Time/Space Conflicts with Other Activities	63 (28.4)	227 (39.0)*
Lack of Financial Resources for Supplies/Programs	162 (33.5)	162 (33.5)
Lack of Interest from Congregation	85 (38.3)	157 (26.8)*
Leadership Feels Health/Wellness Should Not Be Addressed Within the FBO	37 (16.8)	72 (12.4)
Facilitators		
Health/Wellness Interest/Awareness from Congregation Members	154 (68.4)	398 (66.4)
Financial Resources for Equipment/Programs	99 (44.0)	269 (44.9)
Financial Resources for Staff Time	81 (36.0)	274 (45.7)
Training for Health/Wellness	64 (28.4)	178 (29.7)
Training for Organizing/Motivating Volunteers	42 (18.7)	145 (24.2)

FBO: Faith-based organizations; Note * indicates significant difference in frequency of reporting barrier or facilitator between urban and rural FBOs.

Discussion

This is among the first studies to examine urban-rural differences in faith-based health promotion programming. FBOs have the potential to reach a large portion of the population with health promotion programming, serving as a strong public health partner to target disease prevention. This study revealed a number of important trends and influences on health promotion in urban and rural FBOs that provide insight into future interventions and population-level strategies for improving health.

FBOs have been valuable partners in delivering health promotion programs (DeHaven, et al., 2004) and continue to be a strong community partner for reaching diverse and underserved groups. The potential for health promotion and chronic disease prevention among specific groups that are more likely to be affiliated with FBOs are: a) older adults, b) ethnic minority groups, and c) low income populations (Pew Research Center, 2008a). Targeting these groups could result in significant public health impact and is congruent with Healthy People 2020 initiatives for

achieving health equity (USDHHS, 2010). Throughout the US, rural areas generally have a higher proportion of older adults in their population compared with urban areas, suggesting that rural FBOs could serve as an important point for health promotion among this population (Rogers, 2002). Studies examining parish nursing practices in urban and rural areas have also noted some specific differences in type of nursing care, intensity and place of care which could be reflective of these demographic differences (Chase-Ziolek & Striepe, 1999). In the southern US, a greater portion of the rural population report being of low socioeconomic status (McLaughlin, 2002), which has significant implications for healthcare access and preventive health behaviors, an issue that rural FBOs could help address.

There were a number of interesting findings concerning faith leader health. Urban faith leaders were more likely to meet current physical activity recommendations and were less likely to be overweight or obese compared with rural faith leader. Some of these findings were consistent with similar studies examining a general population of faith leaders' health (Proeschold-Bell & LeGrand, 2010). Although not significant, there were trends indicating that urban faith leaders were more likely to consume five or more fruits and vegetables daily and had fewer chronic diseases compared with their rural counterparts. Other studies have documented poor health and behaviors among pastors, especially concerning mental health issues (e.g. burn-out, stress, depression, anxiety) (Weaver, Flannelly, Larson, Stapleton, & Koenig, 2002), though none have looked at differences in urban and rural populations. Rural faith leaders are more likely to have high levels of debt, have other jobs in addition to their pastoral duties and possibly have multiple congregations to oversee (Jung et al., 1998; Van Biema, 2009), resulting in the possibility of a lack of time for self-care or participation in healthy behaviors. Separate analyses of this data have indicated that faith leader health and behaviors are related to the amount of HWA within an FBO (Bopp & Fallon, 2011), indicating the importance of targeting faith leader health with future initiatives. These strategies may fit logically into programs developed through the parent organization e.g. conference or diocese, through health insurance incentive programs or initiatives to ensure a wide reach across both urban and rural regions.

FBOs in rural areas were less likely to offer HWA and the programs and activities they did offer were more educational and less of a time burden. This is congruent with the finding that rural FBOs were more likely to be smaller, suggesting they have a smaller volunteer base to draw from for organizing activities, a smaller FBO administrative staff, and less physical space for programs. This indicates that educational activities that require minimal resources, time and space may be a viable option compared with more action-oriented, hands-on approaches. Though often not culturally tailored for spiritual settings, FBOs could make use of materials widely available from trusted sources e.g. American Heart Association, National Cancer Institute to provide members with basic information pertaining to health. FBOs could also employ technology to reach their congregation members with minimal resource commitments. For example; parent organizations could design website or other online materials for FBOs to disseminate to their members, or faith leaders could communicate health messages via email or listserv to minimize costs. Using other evidence based programs e.g. Body and Soul (Resnicow et al., 2004) that have been designed for widespread dissemination offers possible effective strategies for improving the health of FBO members in institutions with limited space, staff or resources. Parish nurses could play a role in disseminating information or programs, and may be a possibility even for rural churches that may share the time and effort of one parish nurse that receives training and support from parent organizations.

Across both urban and rural FBOs there was the consistent finding that the barriers to HWA included a lack of lay leadership/volunteers, lack of resources for staff time and a lack of interest from the congregation. Parent organizations could attempt to address these barriers through a variety of different educational or training programs for faith leaders or FBO lay leaders. Faith leaders would benefit from instruction in some of the basics of health promotion program planning, stressing the importance of how to recruit reliable, interested members to participate and conducting needs assessment to better understand the needs and preferences of their congregations to encourage more interest and engagement in health related programs. Another possible vehicle for delivering this information to faith leaders would be as a part of seminary school instruction where the majority of faith leaders learn about not only theology but the administrative aspects of running FBOs. In either of these approaches, special mention should be made of some of the unique challenges rural FBOs may face.

Although there were some significant contributions of this study, several limitations must be noted. It should be noted that some denominations were better than others at offering current contact information for faith leaders, which limited the pool of recruits to individuals whose FBO website offered contact information, and also filtered our email invitation into their inbox, rather than junk mail or spam mailboxes, resulting in a low, however very conservative response rate. There was also a volunteer bias, with individuals motivated or interested enough to access and complete the survey more likely to respond. Our final limitations were a result of our measures and designs. For this study we employed the use of self-report measures which are subject to bias and the perceptions of a single individual within a FBO. Our cross-sectional study design limits our ability to determine predictors of FBO HWA and/or fluctuations in HWA over time. Additional research in this area should consider alternate methodology, including random sampling procedures and providing increased incentives for participation for a better response rate. Future investigations may include mixed methodologies to allow for a qualitative, in-depth examination of some of the influences on health promotion programs in rural FBOs.

Despite these limitations the findings from this study provide valuable insight in regard to the current status of health and wellness programming and activities currently being offered at FBO throughout the US. Previous evidence-based approaches have shown that FBOs can serve as a place for health promotion strategies effective for changing health and behaviors, indicating the importance of this community institution as a place for delivering public health messages. Understanding the unique needs, preferences and barriers to HWA within rural FBOs can lead to tailored strategies for addressing some of these challenges and result in effective programming to target health promotion and disease prevention.

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