



Published in final edited form as:

J Immigr Minor Health. 2013 August ; 15(4): 758–763. doi:10.1007/s10903-012-9645-z.

Resources and interest among faith based organizations for influenza vaccination programs

K Bond^{1,2}, **K Jones**^{1,3}, **DC Ompad**^{1,4}, and **D Vlahov**^{1,5}

¹Center for Urban Epidemiologic Studies, New York Academy of Medicine, New York, NY, USA

²Division of General Internal Medicine, Mount Sinai School of Medicine, New York, NY

³Yale University School of Nursing, New Haven, CT, USA

⁴Department of Nutrition, Food Studies, and Public Health and the Center for Health, Identity, Behavior and Prevention Studies (CHIBPS), New York University Steinhardt School of Education, Culture and Human Development, New York, NY, USA

⁵University of California, San Francisco School of Nursing, San Francisco, CA, USA

Abstract

In the United States, annual influenza vaccination rates are suboptimal and are well below the national health objectives. Project VIVA mobilized community members and organizations to implement an influenza vaccination program in Harlem by administering vaccines in “non-traditional” venues, such as community-based organizations, pharmacies, and faith-based organizations (FBOs). FBOs have been recognized as important venues for health promotion initiatives within medically underserved communities. However, data regarding the extent of resources and interest in health promotion programs among FBOs are sparse. We conducted a telephone survey among 115 FBOs in three New York City neighborhoods with histories of low influenza immunization rates to identify the congregation’s health concerns, interest in serving as a community-based venue for influenza vaccinations, and existing resources for health programming. Twenty-six percent of the FBOs had an established health ministry, while 45% expressed interest in developing one. Seven percent included nurses among their health activities and 16.5% had contact with the local health department. Most FBOs expressed interest in common health promotions programs; 60% expressed interest in providing on-site influenza vaccination programs within their organization. Health programs within FBOs can be a point of access that may improve the health of their congregants as well as the larger community.

Keywords

influenza vaccination; faith-based organizations; disparities; community-based participatory research

Annual vaccinations have been effective in reducing influenza-related morbidity and mortality. In the United States, annual influenza vaccination rates are suboptimal among older adults and are well below the national health objectives articulated by the Healthy People 2020 goals: 80% coverage for individuals ages 50 to 64 years and 90% coverage for individuals aged 65 and older [1]. During the 2010–2011 influenza season, vaccine coverage was 44.5% among U.S. adults aged 50 to 64 years and 66.6% among those aged 65 and older [10]. In 2009 Community Health Survey, 35.2% of New York City (NYC) residents aged 50–64 and 52.6% of those aged 65 and older reported being vaccinated in the past year [26].

In the U.S., there are significant and long-standing disparities in influenza vaccination coverage. During the 2010–2011 influenza season, 45.7% of Non-Hispanic Whites aged 50 to 64 were vaccinated as compared to 38.4% of Non-Hispanic Blacks and 41.9% of Hispanics [10]. Among adults aged 65 and older, 67.7% of Non-Hispanic Whites were vaccinated as compared to 56.1% of Non-Hispanic Blacks and 66.8% of Hispanics [10]. In NYC, the pattern is similar: 41.3% of Non-Hispanic Whites aged 50 to 64 were vaccinated as compared to 30.89% of Non-Hispanic Blacks and 30.0% of Hispanics [26]. Among NYC residents aged 65 and older, 59.5% of Non-Hispanic Whites were vaccinated as compared to 40.6% of Non-Hispanic Blacks and 48.4% of Hispanics [26].

Harlem has been long recognized as an underserved community in NYC. At the New York Academy of Medicine (NYAM), a community-academic-health department partnership (known as the Harlem Community and Academic Partnership or HCAP) was established in 2000 with the purpose of improving the health of Harlem residents. Based on disappointingly low rates of influenza immunization in the community, the local health department developed outreach programs in Harlem and other underserved communities in efforts to increase rates, but with modest impact. HCAP took on this challenge and a project was developed called Venue Intensive Vaccines for Adults or more simply, Project VIVA [12, 13]. The objective was to engage community-based non-governmental resources not to replace, but rather to supplement, the health department efforts aimed at improving rates of influenza immunizations in Harlem.

Project VIVA mobilized community members and organizations to implement an influenza vaccination program in Harlem that included vaccine administration in “non-traditional” venues, such as community-based organizations, pharmacies and faith-based organizations (FBOs) [29]. For the purposes of this study, FBOs are places of worship or congregations [2]. There is substantial interest in understanding the capacity of FBOs to engage in health promotion and disease prevention activities [2]. Health ministries have been defined as, “the intentional reaching out to others by a community of faith to promote wholistic health, which is seen as an integration of body, mind and spirit” [11]. Many faith-based organizations (such as churches, temples, synagogues, and mosques) have developed or are developing health ministries and extending those ministries beyond their own members to include entire communities, bringing services to the larger communities they serve and “an expanded ethic of service” to their faith community [6]. From the outset, Project VIVA understood the importance of engaging a variety of partners and partnerships with FBOs in

particular were recognized as important for outreach education and possible sites for immunizing the community.

Health promotion initiatives in FBOs have been recognized as important strategies to reduce health disparities because of the status of FBOs within their communities and their ability to reach broad populations [8, c.f., 19]. This is especially the case for medically underserved communities where racial and ethnic disparities in morbidity, mortality, access to care and quality of care have been well documented [15, 24]. A variety of approaches to initiate or enhance the opportunities that places of worship may provide for health promotion have been reported. These include community academic partnerships, health department outreach programs, and the parish nurse movement among others [18, 25, 28]. Descriptions of such programs tend to report single or small clusters of participant FBOs [17]. From a community health perspective, whether such programs can be scaled up to include a large number of FBOs remains an open question. Part of the answer lies in documenting the interests that a range of FBOs in communities express as well as documenting existing resources such as health ministries and programs already in place.

The extant literature documents many FBO-based and -placed programs that have addressed a range of health conditions (e.g., diabetes, HIV, influenza, cardiovascular health, and cancer) in an effort to reach communities that have a history of high morbidity and mortality rates caused by preventable diseases [24, 32, 33]. These faith-based health promotion (FBHP) programs have been successful in improving the health of minorities with evidence of strong participation among members from the design to the implementation of the program [32]. A large proportion of the information on FBHP has been focused on Black churches. Working with FBOs in Black communities has become vital resource in efforts to reach populations that are considered easy to miss, since some members of these communities may be skeptical of government public health efforts and are often medically underserved [4, 7, 8, 30].

The purpose of the FBO survey was to document interest in and the capacity of FBOs in medically underserved communities in NYC to address health issues with their congregations, with a particular focus on influenza vaccination. Efforts to expand immunizations among underserved populations require creative and intensive efforts and must involve community organizations that can prepare for and promote vaccination in non-traditional settings and at times convenient to the target population [7, 13].

METHODS

Study population

Using the political boundaries of the NYC United Hospital Fund, a list of FBOs (including but not exclusive to churches, mosques and synagogues) was created for three medically-underserved neighborhoods in NYC as defined by the Health Resources and Services Administration (HRSA) [23]. These neighborhoods were Harlem, the South Bronx and Central Brooklyn. The list and contact information for FBOs within each neighborhood was obtained from Google searches and cross-referenced with the internet Yellow Pages.

For all FBOs identified, phone calls were made to contact an FBO officer, defined as a minister (across the variety of designations in each denomination), deacons or executive directors. Each number was attempted at least three times.

Questionnaire

Trained study staff administered a brief, standardized instrument to consenting respondents over the phone. We first asked about the number of ministers and/or clergy in the FBO and the size of the congregation. We then asked about types of groups and/or ministries at the FBO, including youth and senior programs, health ministries, nurses, food pantries, music ministries, and pastoral care. We did not ask about the specific activities that each group or ministry engaged in.

We then asked the respondents about the specific health topics that were of interest to the congregation, specifically querying about diabetes, lung disease, weight loss and nutrition, substance abuse recovery, smoking cessation, childhood immunizations, heart disease and blood pressure, screenings for breast, colon, lung and prostate cancer, or some other health concern. We determined if there was an interest in establishing (if not already in existence) a health ministry and if the FBOs were working directly with the New York City Department of Health and Mental Hygiene. Most relevant to the ongoing project, we determined interest in providing immunizations as a host site in the upcoming season. Data were collected from June to August 2010.

Analyses

Given the purposive nature of the survey, and the limited response rate, only the tabulations of frequency distributions are presented.

RESULTS

Across the three neighborhoods, a total of 773 FBOs were identified. Of these, 580 had operational contact information; of these, 123 picked up the phone with an eligible leader of the congregation as a respondent; of these, 115 consented resulting in a response rate of 19.8%. Of the 115 FBOs completing the survey, 35 were in Harlem, 57 in the South Bronx and 23 were in Central Brooklyn. The FBOs that responded to the survey were primarily Christian denominations (i.e., Baptist, Catholic, Church of Christ, Lutheran, Methodist, Pentecostal, and Seven Day Adventist); one mosque also participated. The congregations of the FBOs varied in membership size with a mean of 447 members and a range from 50 to 8000 members. The majority of the FBOs were had one minister or clergyperson (66.1%), 8.7% had two and 22.6 % had three or more in their congregation. Three of the FBOs contacted did not have an appointed leader at that time.

FBO Health Resources and Interests

Table 1 shows responses to survey questions by neighborhood. Although interest and activities varied between the three neighborhoods, several trends are noteworthy. Approximately half (51.3%) had a youth ministry, 27.8% had a senior ministry, and 42.6% had a food pantry (see Table 1). Thirty FBOs (26.1%) had a health ministry. Among those

without a health ministry, interest in establishing one was 34.3% in Harlem, 43.9% in the South Bronx and 63.6% in Central Brooklyn. Only 7% reported having nurses as part of their health-related activities. Nineteen FBOs (16.5%) had contact with the local health department. When asked to provide additional comments, six (5.2%, data not shown) FBOs, five in the Bronx and one in Harlem, reported providing influenza vaccines to their congregation during the season. Those FBOs that provided influenza vaccines had established relationships with neighborhood hospitals or clinics.

Institutional leadership reported high interest in health issues for their congregations including diabetes (93.9%), heart disease (93%) and cancer screening (88.7%). There was also great interest in addressing lung disease, HIV/AIDS, weight loss, substance abuse/recovery, smoking cessation, and childhood immunizations. Interest tended to be higher in Bronx and Brooklyn than in Harlem. In terms of an influenza immunization campaign, the majority (60.2%) expressed interest in being a vaccination host site.

DISCUSSION

The major finding of this survey was the untapped potential of FBOs to be venues for health promotion activities in urban communities. Interest in health-related topics was high, yet the proportion of FBOs with health-related programs and staffing or contact with the local health department was relatively low.

Greater efforts at outreach to FBOs to incorporate health promotion activities could enhance ongoing activities. Examples of FBOs that have incorporated and shown success with health promotion activities suggest proof of concept. One project in Syracuse, New York demonstrated improved health nutrition through a program partnership of FBOs and an academic program by achieving leadership support and establishing a collaborative relationship with the congregation that provided input in the design of a culturally sensitive program [17]. Individuals who participated in this church-based nutrition and fitness program indicated notable shifts toward healthier food choices, cooking methods, and exercise habits, as well as increased motivation, improved health indicators, and revamped church menus. This FBHP program created a project that was targeted to the needs and preferences on the church members, which facilitated ownership and pride in their church-designed health intervention.

The FBOs included in the present study demonstrated a significant interest in a range of health promotion activities, which included substance abuse recovery, cancer screenings, weight loss programs and smoking cessation. In addition, the opportunity to develop preventive health services, such as onsite vaccination programs was of great interest to the FBO leadership surveyed. In a survey completed by 98 pastors from five Christian denominations, more than 80% of the clergy favored using congregational facilities for health screenings (e.g., blood pressure), prevention interventions (e.g., influenza vaccinations), and health-related classes (e.g., nutrition). In addition, 74% of the 500 congregational members surveyed wanted preventive services to be offered at their FBO [22]. Research has shown that providing preventive services on-site at the FBO facilities can be more beneficial than educational messages alone. In a randomized study comparing the

effect of providing influenza vaccine education only versus the provision of the on-site vaccination, influenza immunization rates were shown to be more than four times greater among the FBOs that offered onsite vaccinations [18].

FBOs have resources and access to community members to implement health promotion programs that are not utilized in other academic or government intervention activities. They also provide an attractive alternative venue to recruit and retain participants, since the congregation members already have a connection and relationship to the FBO. In the Black community, FBOs continue to be important institutions –FBO leaders can have a significant impact on the knowledge, attitudes, beliefs, and behaviors within their congregations. It is thought that clergy are often able to get their message across without encountering the resistance other prevention efforts might experience in this community. Further, clergy can provide public health practitioners and researchers access to their members [27]. For example, in a randomized study among 21 Black churches in East Baltimore, pastoral testimonies and trained volunteer counselors were used for a smoking cessation intervention. The intervention group, which included more leadership support, was nearly twice as likely to quit smoking compared to the minimal intervention group [31].

Health ministries exist in some FBOs, yet what constitutes key components of an effective health ministry remains an open question. In one survey FBO leaders, attributes perceived as very important for health ministries included displaying health information in FBOs (73.6%), hosting health fairs for faith community members (73.2%), FBO-provided internet access (70.8%), willingness to receive foundation funding for activities (66.7%), and incorporating health messages in FBO bulletins (65.3%) [9]. It is important to note that what was rated as important did not consistently match up with what respondents reported as being done in their FBOs.

There were a limited number of nursing units identified in our sample of FBOs. Nurses have held a unique role within FBOs, but their role could be expanded through liaison and partnerships with other health professionals in the implementation of health promotion and educational programs. The role of nursing in health promotion within FBOs can be considered in a number of ways, from health department outreach, community-academic partnerships, and direct faith community involvement as volunteers. Some attention has been devoted to developing and describing parish nurses [5, 14, 25] and more recently, a parish nursing faculty practice model [16]. Attention is being directed at elements for effective practice and training [28, 35].

Not all FBOs are likely to embrace health promotion programs in the same way, if at all. Whether topics are discussed depends on views of an FBO's leadership about health topics and their sense of the congregation's receptivity to content [34]. Discordance between the leadership's and faith community's receptivity to health messaging could reflect the leadership's beliefs or perceptions. Discussions with both leadership and faith community members might clarify direction for an FBO. Some programs have addressed this [3]. Several of the FBOs surveyed were not able to respond to the question of wanting to establish a health ministry or vaccination site clinic due to the fact that decisions regarding the congregation were made by a board and not solely the leader of that particular FBO.

Other deciding factors such as demographics, health concerns of the community, the congregation's priorities, and the feasibility of the program influences the acceptability of a FBHP.

FBOs represent social networking and support opportunities, especially within underserved communities that experience significant health disparities. FBO structure has been recognized to be an important node for community health [21]. In the context where minority communities hold historic mistrust against the traditional public health infrastructure, community health practitioners have reached out to faith community leadership to broker public health engagement. However, faith community leadership can hold beliefs about the spiritual limits or distraction of health promotion, or perceive faith community preferences that could run counter to their cooperation and advocacy and threaten their positions [17]. As FBOs within communities represent a range of beliefs, the appeal of scale up through these organizations to enhance community wide health promotion must be balanced with appreciating the range of these beliefs and the variable readiness of the different FBOs to participate. Working with FBOs to build capacity should extend beyond single projects such as seasonal influenza to build toward a sustainable network on community outreach centers.

Many FBOs have the infrastructure to implement health programs and a strong need to enhance the health of their congregations, but they often lack the expertise in carrying out health programs and could benefit from the technical support from either academic or public health institutions. In addition, faith-based settings can provide researchers access to populations that have traditionally been difficult to recruit into research studies. Some evidence suggests that FBOs with health programs may improve the health of their community [20]. Evidence that FBOs have made an impact on broader community health is elusive. Tapping into the power of FBOs and the increasing articulation of health promotion models, the ability expand health promotion and demonstrate its effectiveness is the next step.

Acknowledgments

This study was conducted as part of the Project VIVA (Venue-Intensive Vaccination for Adults) and is collaboration between the Harlem Community Academic Partnership (HCAP) and the Center for Urban Epidemiologic Studies (CUES) at the New York Academy of Medicine. The VIVA Intervention Working Group members are: Diane Bonavota (Palladia, Inc.) Keosha Bond (CUES), Ann Boyer (Mt. Sinai Medical Center), Ginger Crawford (CUES), Kandice Jones (CUES), Monique Kusick (CUES), Christal Montague (Palladia, Inc.), Ronnie Moore (Touro College of Pharmacy), Danielle Ompad (CUES and New York University), Sharon Stancliff (Harm Reduction Coalition), David Vlahov (CUES and University of California San Francisco), Edward Wake (New York Department of Health and Mental Hygiene), and Gloria White (Lehman College). This study was supported by a grant from the National Institute for Minority Health and Health Disparities (1R24 MD002754).

References

1. [Accessed: 9-21-2011] Healthy People 2020: Immunization and Infectious Diseases. <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=23>
2. Asomugha CN, Derose KP, Lurie N. Faith-based organizations, science, and the pursuit of health. *J Health Care Poor Underserved*. 2011; 22:50–5. [PubMed: 21317505]

3. Atkinson MJ, Boltri JM, Davis-Smith M, et al. A qualitative inquiry into the community and programmatic dimensions associated with successful implementation of church-based diabetes prevention programs. *J Public Health Manag Pract.* 2009; 15:264–73. [PubMed: 19363407]
4. Baruth M, Wilcox S, Laken M, et al. Implementation of a faith-based physical activity intervention: insights from church health directors. *J Community Health.* 2008; 33:304–12. [PubMed: 18473154]
5. Bergquist S, King J. Parish nursing--a conceptual framework. *J Holist Nurs.* 1994; 12:155–70. [PubMed: 8195573]
6. Brooks RG, Koenig HG. Crossing the secular divide: government and faith-based organizations as partners in health. *Int J Psychiatry Med.* 2002; 32:223–34. [PubMed: 12489698]
7. Bryant WK, Ompad DC, Sisco S, et al. Determinants of influenza vaccination in hard-to-reach urban populations. *Prev Med.* 2006; 43:60–70. [PubMed: 16684559]
8. Campbell MK, Hudson MA, Resnicow K, et al. Church-based health promotion interventions: evidence and lessons learned. *Annu Rev Public Health.* 2007; 28:213–34. [PubMed: 17155879]
9. Carter-Edwards L, Jallah YB, Goldmon MV, et al. Key attributes of health ministries in African American churches: an exploratory survey. *N C Med J.* 2006; 67:345–50. [PubMed: 17203634]
10. Centers for Disease Control and Prevention. [Accessed: 9-21-2011] Final state-level influenza vaccination coverage estimates for the 2010–11 season–United States. National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011. http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm
11. Chase-Ziolek M. The meaning and experience of health ministry within the culture of a congregation with a parish nurse. *J Transcult Nurs.* 1999; 10:46–55. [PubMed: 10476152]
12. Coady MH, Galea S, Blaney S, et al. Project VIVA: a multilevel community-based intervention to increase influenza vaccination rates among hard-to-reach populations in New York City. *Am J Public Health.* 2008; 98:1314–21. [PubMed: 18511725]
13. Coady MH, Weiss L, Galea S, et al. Rapid vaccine distribution in nontraditional settings: lessons learned from project VIVA. *J Community Health Nurs.* 2007; 24:79–85. [PubMed: 17563280]
14. Coenen A, Weis DM, Schank MJ, et al. Describing parish nurse practice using the Nursing Minimum Data Set. *Public Health Nurs.* 1999; 16:412–6. [PubMed: 10620251]
15. Collie-Akers V, Schultz JA, Carson V, et al. Evaluating mobilization strategies with neighborhood and faith organizations to reduce risk for health disparities. *Health Promot Pract.* 2009; 10:118S–27S. [PubMed: 19454758]
16. Connor A, Donohue ML. Integrating faith and health in the care of persons experiencing homelessness using the parish nursing faculty practice model. *Fam Community Health.* 2010; 33:123–32. [PubMed: 20216355]
17. Cowart LW, Biro DJ, Wasserman T, et al. Designing and pilot-testing a church-based community program to reduce obesity among African Americans. *ABNF J.* 2010; 21:4–10. [PubMed: 20169806]
18. Daniels NA, Juarbe T, Moreno-John G, et al. Effectiveness of adult vaccination programs in faith-based organizations. *Ethn Dis.* 2007; 17:S15–S22. [PubMed: 17598312]
19. DeHaven MJ, Hunter IB, Wilder L, et al. Health programs in faith-based organizations: are they effective? *Am J Public Health.* 2004; 94:1030–6. [PubMed: 15249311]
20. Drayton-Brooks S, White N. Health promoting behaviors among African American women with faith-based support. *ABNF J.* 2004; 15:84–90. [PubMed: 15532240]
21. Giger JN, Appel SJ, Davidhizar R, et al. Church and spirituality in the lives of the African American community. *J Transcult Nurs.* 2008; 19:375–83. [PubMed: 18650398]
22. Hale WD, Bennett RG. Addressing health needs of an aging society through medical-religious partnerships: what do clergy and laity think? *Gerontologist.* 2003; 43:925–30. [PubMed: 14704393]
23. Health Resources and Services Administration. [Accessed: 6-9-2011] Shortage Designation: Health Professional Shortage Areas & Medically Underserved Areas/Populations. <http://bhpr.hrsa.gov/shortage/>
24. Kegler MC, Hall SM, Kiser M. Facilitators, challenges, and collaborative activities in faith and health partnerships to address health disparities. *Health Educ Behav.* 2010; 37:665–79. [PubMed: 20696884]

25. Magilvy JK, Brown NJ. Parish nursing: advancing practice nursing. Model for healthier communities. *Adv Pract Nurs Q*. 1997; 2:67–72. [PubMed: 9447107]
26. New York City Department of Health and Mental Hygiene. [Accessed: 9-21-2011] Epiquery: NYC Interactive Health Data System - [Community Health Survey 2009]. <http://nyc.gov/health/epiquery>
27. Peterson J, Atwood JR, Yates B. Key elements for church-based health promotion programs: outcome-based literature review. *Public Health Nurs*. 2002; 19:401–11. [PubMed: 12406175]
28. Solari-Twadell PA, Hackbarth DP. Evidence for a new paradigm of the ministry of parish nursing practice using the nursing intervention classification system. *Nurs Outlook*. 2010; 58:69–75. [PubMed: 20362775]
29. Vlahov D, Bond KT, Jones KC, et al. Factors Associated with Differential Uptake of Seasonal Influenza Immunizations Among Underserved Communities During the 2009–2010 Influenza Season. *J Community Health*. 2011 epub ahead of print.
30. Vlahov D, Coady MH, Ompad DC, et al. Strategies for improving influenza immunization rates among hard-to-reach populations. *J Urban Health*. 2007; 84:615–31. [PubMed: 17562184]
31. Voorhees CC, Stillman FA, Swank RT, et al. Heart, body, and soul: impact of church-based smoking cessation interventions on readiness to quit. *Prev Med*. 1996; 25:277–85. [PubMed: 8781005]
32. Williams MV, Palar K, Derose KP. Congregation-Based Programs to Address HIV/AIDS: Elements of Successful Implementation. *J Urban Health*. 2011; 88:517–32. [PubMed: 21331749]
33. Williams RL, Flocke SA, Stange KC. Race and preventive services delivery among black patients and white patients seen in primary care. *Med Care*. 2001; 39:1260–7. [PubMed: 11606879]
34. Williams RM, Glanz K, Kegler MC, et al. A Study of Rural Church Health Promotion Environments: Leaders' and Members' Perspectives. *J Relig Health*. 2009; 51:148–60. [PubMed: 19960262]
35. Ziebarth DJ, Miller CL. Exploring parish nurses' perspectives of parish nurse training. *J Contin Educ Nurs*. 2010; 41:273–80. [PubMed: 20411881]

Table 1

Characteristics of faith-based organizations' health resources and interests: Harlem, Bronx, and Brooklyn (New York City), 2010

	Total N=115(%)	Harlem N=35(%)	Bronx N=57(%)	Brooklyn N=23(%)
Current ministries and groups				
Youth	59 (51.3)	13 (37.1)	34 (59.6)	12 (52.2)
Health	30 (26.1)	10 (28.6)	15 (26.3)	5 (21.7)
Senior	32 (27.8)	11 (31.4)	18 (31.6)	3 (13.0)
Food pantry	49 (42.6)	14 (40.0)	28 (49.1)	7 (30.4)
Nurse	8 (7.0)	2 (5.7)	4 (7.0)	2 (8.7)
Music	55 (47.8)	18 (51.4)	27 (47.4)	10 (43.5)
Pastoral	6 (5.2)	4 (11.4)	2 (3.5)	--
Other ministries ¹	49 (42.6)	19 (54.3)	22 (38.6)	8 (34.8)
Congregation health interests				
Diabetes	108 (93.9)	30 (85.7)	55 (96.5)	23 (100.0)
Lung disease	93 (80.9)	25 (71.4)	47 (82.5)	22 (95.7)
HIV/AIDS	93 (80.9)	25 (71.4)	46 (80.7)	22 (95.7)
Weight loss/nutrition	94 (81.7)	24 (68.6)	48 (84.2)	22 (95.7)
Substance abuse/recovery	90 (78.3)	23 (65.7)	46 (80.7)	21 (91.3)
Smoking cessation	96 (83.5)	25 (71.4)	50 (87.7)	21 (91.3)
Childhood immunizations	91 (79.1)	23 (65.7)	46 (80.7)	22 (95.7)
Heart disease	107 (93.0)	30 (85.7)	54 (94.7)	23 (100.0)
Cancer screening	102 (88.7)	30 (85.7)	50 (87.7)	22 (95.7)
Other	12 (10.4)	2 (5.7)	7 (12.3)	3 (13.0)
Interest in establishing a health ministry	51 (44.7)	12 (34.3)	25 (43.9)	15 (63.6)
Contact with local department of health	19 (16.5)	5 (14.3)	12 (21.1)	2 (8.7)
Interest in being a vaccine host site	69 (60.2)	18 (51.4)	39 (67.9)	13 (54.6)

¹Other ministries include prayer groups, trustee boards, usher boards, gender-based ministries, etc.