

# UCLA

## UCLA Previously Published Works

### Title

The Role of Faith-Based Organizations in the Depression Care of African Americans and Hispanics in Los Angeles

### Permalink

<https://escholarship.org/uc/item/2mp1846c>

### Journal

Psychiatric Services, 68(4)

### ISSN

1075-2730

### Authors

Dalencour, Michelle  
Wong, Eunice C  
Tang, Lingqi  
[et al.](#)

### Publication Date

2017-04-01

### DOI

10.1176/appi.ps.201500318

Peer reviewed



# HHS Public Access

Author manuscript

*Psychiatr Serv.* Author manuscript; available in PMC 2018 April 01.

Published in final edited form as:

*Psychiatr Serv.* 2017 April 01; 68(4): 368–374. doi:10.1176/appi.ps.201500318.

## The Role of Faith-Based Organizations in the Depression Care of African Americans and Latinos in Los Angeles

Michelle Dalencour, M.D., M.S.H.P.M., Eunice C. Wong, Ph.D., Lingqi Tang, Ph.D., Elizabeth Dixon, R.N., Ph.D., Aziza Lucas-Wright, M.Ed., Kenneth Wells, M.D., M.P.H., and Jeanne Miranda, Ph.D

Dr. Dalencour was with the Robert Wood Johnson Clinical Scholars program, Dr. Tang, Dr. Wells, and Dr. Miranda are with the Department of Psychiatry and Biobehavioral Sciences and the Center for Health Services and Society, Dr..Dixon is with the School of Nursing, all at the University of California, Los Angeles (Michelle.Dalencour@bmc.org). Dr. Wong is with RAND Corporation, Santa Monica, California and Ms. Wright is with the Charles R. Drew University of Medicine, UCLA/RAND Corporation and Healthy African American Families

### Abstract

**Objective**—This study examined use of depression care provided by faith-based organizations (FBOs) by African Americans and Hispanics and factors associated with the receipt of such care, including mental illness severity and use of traditional mental health services.

**Methods**—The study used baseline data from the Community Partners in Care study, a group-randomized trial comparing a community-partnered approach with a technical-assistance approach to improving depression care in underresourced communities in Los Angeles. A sample of 947 individuals (48% African American, 27% non-U.S.-born Hispanic, 15% U.S.-born Hispanic, and 10% non-Hispanic white) were surveyed about recent visits to a religious or spiritual place and receipt of FBO depression care. Descriptive analyses compared racial-ethnic, sociodemographic, and health service use variables for three groups: those who did not attend a religious place, those who attended a religious place and did not receive FBO depression services, and those who received FBO depression services. Multinomial logistic regression was used to identify predictors of receipt of FBO depression care.

**Results**—A larger proportion of African Americans and non-U.S.-born Hispanics received FBO faith-based depression services compared with non-Hispanic whites and with U.S.-born Hispanics. Receipt of FBO depression services was associated with younger age, lifetime diagnosis of mania, use of primary care depression services, and receipt of a mental health service from a substance abuse agency.

---

Corresponding Author: Dr. Michelle Dalencour, Assistant Professor of Family Medicine, Boston University, School of Medicine, 771 Albany St., Boston, MA, 02118; phone: (617) 414-4465; dalencou@bu.edu.

Disclosures: The authors have no conflict of interests to report.  
The authors report no financial relationships with commercial interests.

Previous Presentation: Robert Wood Johnson Foundation Clinical Scholars National Meeting, New Orleans, LA November 3–6, 2014  
African Americans, Depression, Religion & metapsychiatry, Hispanics, Community mental health services

**Conclusions**—FBO depression services were used in the community, especially by persons from racial-ethnic minority groups. Collaborative efforts between FBOs and traditional health services may increase access to depression services for African Americans and Latinos.

Even though depression is a leading cause of morbidity in the United States (1), it continues to be undertreated in racial-ethnic minority populations. African Americans and Latinos are less likely than non-Hispanic whites to receive depression care and less likely to receive high-quality care (2). Between 2008 and 2012, only 30% of African Americans and 27% of Latinos with any past-year mental illness used mental health services, compared with 46% of non-Hispanic whites (3). Low rates of use among African Americans and Latinos have been attributed to many factors, including cost, lack of insurance, language barriers, and limited availability of culturally competent providers (3,4). Disparities are greater when country of origin is taken into account, and Latinos and blacks not born in the United States have even lower rates of use of mental health care (5–7). Even when analyses control for socioeconomic status, insurance, and transportation barriers, African Americans and Latinos are less likely than whites to receive guideline-concordant care (8–10).

Increasingly, community-partnered engagement strategies are recognized as innovative approaches to reducing disparities (11). In underserved minority populations, such approaches could increase access. Faith-based organizations (FBOs) frequently play a major role in community engagement efforts and may be seen as trusted, nontraditional community institutions to address disparities, particularly given that most African Americans and Latinos report a formal religious affiliation.

FBOs, either religious or spiritual, are increasingly selected as sites for health promotion programs in underresourced communities (12,13). FBOs have a long history of providing healing for psychological illnesses (14,15) and continue to play a role in the mental health services delivery system (16). Studies have (17,18) found that among past-year users of mental health services, 8.1% reported being treated by a human service provider, which included a religious or spiritual advisor in a nonmental health setting. Despite the role of FBOs, limited data exist on the extent to which African-American and Hispanic service users rely on FBOs for mental health care, the types of care provided by FBOs, and how this care is related to the use of formal mental health services. In underresourced communities, people with depression may be receiving diverse health, social, or community services that may or may not be coordinated; yet these services may constitute the extended service network used and trusted within the community, including services provided by FBOs.

This study aimed to assess the role of FBO depression services as part of the extended services received in Los Angeles, the type of support FBOs provide, and the characteristics of persons receiving FBO depression care, including their mental health needs and use of traditional services. This information could lead to targeted and coordinated strategies by both FBOs and formal mental health providers to increase access and treatment among African Americans and Latinos with depression in underresourced communities.

## Methods

This study drew from baseline data from Community Partners in Care (CPIC), a group-randomized comparative effectiveness trial that compared a community engagement and planning approach with technical assistance to improve depression services in two predominately African-American and Hispanic underresourced communities in Los Angeles (19,20). CPIC was designed and implemented by the CPIC council by using a community-partnered participatory approach (21). The CPIC council included 35 leaders from three academic and 24 community-based agencies. This study was approved by the institutional review boards of RAND and participating agencies. CPIC council members identified agencies and organizations in five settings for study inclusion. Settings included outpatient primary care, outpatient mental health services, substance abuse residential and outpatient services, social and housing services for homeless persons, and other social and community-based services, which included six FBOs. Eligible programs had to serve 15 or more clients per week, have one or more staff members, be financially stable, and could not focus on psychotic disorders or home services. Participants were recruited and screened for depression across study sites from March 2010 to November 2010; procedures oversampled for African Americans. Of the 4,645 adults (ages 18 and older) approached, 4,440 (96%) agreed to the screening. Individuals with moderate to severe depression, as indicated by a score  $\geq 10$  on the eight-item Patient Health Questionnaire, who were willing to provide contact information were eligible to participate (19,22,23). Of the 4,440 screened, 1,322 (30%) were eligible, of whom 1,246 (94%) consented and enrolled. Between April 2010 and January 2011, 981 enrolled clients (79%) completed baseline telephone surveys (two were deceased, 36 refused, and 227 were not reached). The study reported here included only African Americans, Hispanics, and whites in this sample (N= 947).

## Measures

**Sociodemographic variables**—The screener collected the following sociodemographic information: age, gender, marital status, education, employment status, a combined race-ethnicity and nativity variable (U.S.-born Hispanic, non-U.S.-born Hispanic, African-American non-Hispanic, non-Hispanic white, and other).

**Mental health and health status**—Using the Mini-International Neuropsychiatric Interview (24), we created indicators for current (two weeks) major depression episode, current or recent (\_\_\_??\_) anxiety disorder (panic attacks, posttraumatic stress disorder, and seasonal affective disorder), and lifetime diagnosis of mania (20). From survey data, we categorized chronic general medical conditions as three or more or fewer than three out of 18 such conditions and derived an indicator for lifetime diagnosis of or hospitalization for psychosis.

**Mental health service and medication use**—Retrospective, self-report data were used to develop indicators of use of mental health care in the past six months. This included receipt of information, referral, counseling, or medication management for depression or emotional problems as follows: outpatient mental health services outpatient primary care for depression; a substance abuse clinic visit with a mental health service; and an emergency

room visit for alcohol, drug, or mental health problem. Indicators were also developed for use of any psychiatric medication, including antidepressants, antianxiety medications, or any psychiatric drug, for two or more months in the past six months.

**Receipt of depression care from FBOs**—To assess receipt of depression care from FBOs, respondents were asked, “During the past six months, did you go to any religious or spiritual places, such as a church, mosque, temple, or synagogue?” Respondents who answered no were categorized as “did not attend a religious place.” Those who answered yes were stratified as having attended a religious place and further categorized as having or not having received FBO depression care. Receipt of FBO depression care was defined as a report that an FBO provided any of the following: talked about depression, stress, or emotions or gave information, such as a brochure; suggested visiting a specialist or program for depression, stress, or emotions; suggested taking medications or encouraged the respondent to stay on a treatment plan for depression, stress, or emotions; spent more than five minutes counseling about these issues; or gave suggestions about how to cope or encouragement to do things that the respondent enjoyed.

## Analysis

Sample characteristics were described with means and standard deviations for continuous variables and percentages for categorical variables, for the overall sample and for FBO depression care status (that is, those who did not attend a religious place, those who attended but did not receive FBO depression care, and those who attended and received FBO depression care). To examine differences in sample characteristics by FBO depression care status, we fit linear regression models for continuous variables, logistic regression models for dichotomous variables, and a multinomial regression model for predictors of FBO depression care status. Wald chi-square tests were used for overall tests of differences among the three status groups and for the entire sample. Two pairwise comparisons were done: those who received FBO depression care were compared with those who did not attend a religious place and with those who attended a religious place but did not receive FBO depression care. Comparisons were based on regression coefficients, with a Bonferroni correction for two tests.

For the participants in the three status groups, we fit multinomial logistic regression models. Any variable for which the significant univariate test was  $p < .25$  was selected as a candidate for the multivariate analysis (25). [A table in an online supplement to this article presents results of the univariate analysis.] The final multinomial logistic regression was performed fitting the following variables against a two-tailed test ( $p < .05$ ) plus age and gender as covariates: race-ethnicity by U.S.-born status; a lifetime diagnosis of mania; outpatient primary care for depression; a substance abuse visit with a mental health service; and an emergency room visit for alcohol, drug, or mental health problem. To examine the association between attendance at a religious place and receipt of FBO depression care, we performed a logistic regression analysis among participants who attended a religious place. Any variable that was significant in the univariate analysis at  $p < .25$  was selected as a candidate for the multivariate analysis (25). The final model included age, gender, race-

ethnicity by U.S.-born status, attendance at a religious place, current major depression episode, lifetime diagnosis of mania, and receipt of antianxiety medication.

To control for potential response bias, attrition weights were constructed on the basis of characteristics of the eligible sample (26). For item-level missing data, we used an extended hot-deck multiple imputation that was based on the predictive mean matching method (27,28). We imputed five data sets, averaged results, and adjusted standard errors for uncertainty resulting from imputation (28). All analyses used Taylor series linearization available in the complex sample module in SUDAAN software (version 11.01) and accounted for clustering, weighting, and multiple imputations.

## Results

### Receipt of FBO Depression Services

Of 947 participants, 565 (60%) attended a religious place. Of these, 223 (39%) received FBO depression services: 66% (N=146) reported that someone talked to them about depression, stress, or emotions or provided information, such as a brochure; 37% (N=82) reported that someone suggested that they visit a specialist or program for depression, stress, or emotions; 32% (N=72) reported that someone suggested that they take medications or encouraged them to stay on a treatment plan for depression, stress, or emotions; 86% (N=192) reported that someone spent more than five minutes counseling them about these issues, gave them suggestions about how to cope, or provided encouragement to do things they enjoyed.

### Sociodemographic Variables

As shown in Table 1, use of FBO depression care varied by race-ethnicity and nativity ( $p < .001$ ). Fifty-four percent of African Americans, 11% of U.S.-born Hispanics, 30% of non-U.S.-born Hispanics, and 5% of non-Hispanic whites received FBO depression care. Compared with participants who attended a religious place but did not receive FBO depression care, those who received FBO depression care were younger ( $p = .011$ ) and had more visits to a religious place in the past six months (27.5 versus 20.5;  $p = .004$ ).

### Severity of Illness

As shown in Table 1, compared with those who did not attend a religious place, a greater proportion of those who received FBO depression services had a lifetime diagnosis of mania (28% versus 18%;  $p = .019$ ). Similarly, compared with those who attended a religious place but did not receive FBO depression services, those who received FBO depression services were more likely to have experienced a major depressive episode in the past two weeks (50% versus 36%;  $p = .001$ ), have a lifetime diagnosis of mania (28% versus 16%;  $p = .002$ ), have a current or recent diagnosis of an anxiety disorder (53% versus 44%;  $p = .023$ ), and have a lifetime diagnosis of or hospitalization for psychosis (35% versus 26%;  $p = .014$ ).

### Use of Mental Health Care and Medication

As shown in Table 1, a substantial proportion of participants who reported receipt of FBO depression care also reported receipt of services from non-FBO providers. Among those

who received FBO depression care, 52% visited an outpatient primary care provider for depression care and 37% went to an emergency room for an alcohol, drug, or mental health problem in the past six months. Among those who attended a religious place but did not receive FBO depression care, 20% reported a substance abuse visit in the past six months during which they received a mental health service, compared with 32% of those who received FBO depression care ( $p=.038$ ). Among those who received FBO depression care, 61% received depression services at an outpatient mental health agency, compared with 55% of those who attended a religious place but did not receive FBO depression care—although this difference was not significant. In addition, compared with those who attended a religious place but did not receive FBO care, those who received FBO care were more likely to report use of antianxiety medications in the past six months (15% versus 8%;  $p=.011$ ) and use of any psychiatric medication (44% versus 34%;  $p=.033$ ). No significant differences in medication use were found between those who received FBO care and those who did attend a religious place.

### **Multinomial Logistic Regression**

As shown in Table 2, age was a predictor of not attending a religious place (and thus of not receiving FBO depression care). Participants who were older were more likely than younger participants (odds ratio [OR]=1.17) to report not attending a religious place. The odds of not attending a religious place were lower among non-U.S.-born Hispanics (OR=.86) and among African Americans (OR=.45) compared with whites (thus making non-U.S.-born Hispanics and African Americans more likely than whites to receive FBO depression care). Similarly, the odds of not attending a religious place were lower for those with a lifetime diagnosis of mania than for those without such a diagnosis (OR=.59). When the analysis focused only on participants who attended a religious place, no significant predictors of FBO depression care use were found, except for age and lifetime diagnosis of mania. Among those who attended a religious place, the probability of receiving FBO depression care was higher for older participants than younger ones (OR=1.22) and was lower for those with a lifetime diagnosis of mania than for those without such a diagnosis (OR=.56).

### **Multiple Logistic Regression**

Results of the adjusted analysis that focused only on participants who attended a religious place are presented in Table 3. Use of FBO depression care was more likely among participants who made more visits to a religious place, had a lifetime diagnosis of mania, and were taking antianxiety medications.

### **Discussion**

This study examined the extent to which primarily African-American and Hispanic participants in two underresourced Los Angeles communities used depression services from FBOs in the prior six months and the sociodemographic and clinical factors associated with receipt of these services. We found that a substantial proportion (more than 24%) of African-American and Hispanic participants had received FBO depression services. Among all participants who received FBO depression services, more than a third reported that someone encouraged them to visit a specialist or to take their medications and stay on a treatment



plan for depression. These findings are in contrast to studies that have raised concerns that FBOs may discourage individuals from seeking formal mental health services (29,30). For example, some studies have suggested that persons attending FBOs may be advised to rely on spiritual coping strategies, such as prayer, for their mental health needs (30). Our findings indicate that FBO depression services, as defined in this study, can play a substantial role in promoting use of formal mental health services for those in need of treatment (14,31).

Consistent with previous studies, our study found that clients who used FBO depression services had significantly higher mental health needs than those who did not use these services (15,32). Specifically, we found that African-American and Hispanic participants who used FBO depression services were more likely than those who attended a religious place but did not use such services to have a recent major depressive episode, a current anxiety disorder, or a lifetime diagnosis of mania or to have been given a diagnosis of or been hospitalized for psychosis. Younger age was another important independent correlate of use of FBO depression services, suggesting that FBO services may be particularly important for young adults with high mental health needs in racial-ethnic minority populations. Given our finding of the high level of mental health needs among users of FBO depression services, along with our finding that clients perceived FBO service providers as supportive of referral and adherence to formal treatment services and prior evidence suggesting that clergy are interested in implementing depression services if they have appropriate training (33,34), it is important to support the capacity of FBO leaders and service providers to conduct depression screening and make appropriate referrals. Enhancing collaborations between FBOs and formal health sectors might enhance the effectiveness of FBOs in improving access to treatments (14,31,35). Such strategies may help decrease the current gap between need and use of traditional services, which disproportionately affects persons from racial-ethnic minority groups (6).

Our findings appear to suggest that FBO services largely complement traditional mental health care, rather than replacing it. Specifically, the FBO services described were largely related to referral to or encouragement to adhere to traditional services. In addition, participants who received FBO depression services were high utilizers of primary care depression services, consistent with some prior studies (36). Although other studies have suggested that African Americans and Hispanics may rely on clergy as the sole source of mental health care (16,17), depressed clients in our sample who received FBO depression services were more likely than others to report use of psychiatric medications, for example. Some research has shown that persons from racial-ethnic minority populations end mental health treatment prematurely, including medications, and FBO depression services could serve a role in encouraging adherence (37–39), an important issue for future research.

Overall, use of FBO depression services was more likely among African Americans, non-U.S.-born Hispanics, younger adults, persons with a lifetime diagnosis of mania, and those who had received depression care or other mental health care from a substance abuse or primary care program or who went to an emergency room for an alcohol, drug, or mental health problem. These are important factors to consider for future community interventions that address unmet mental health needs in urban underresourced communities. Disparities in mental health care for racial-ethnic minority groups (40) underscore the potential role that



FBO depression services might play in addressing barriers to mental health treatment; such barriers include lack of access, lack of trust, language barriers, partnership and task shifting, and high costs. In addition to providing culturally concordant care, coordination of care between FBOs and traditional mental health services could decrease the current gap between need and treatment.

The study had some limitations. First, FBOs were considered as a single category; however, FBOs represent diverse institutions within communities. Second, all measures were based on self-reports. Third, the study was based in two urban and underresourced communities in Los Angeles. Fourth, African Americans were analyzed as a homogeneous group, and Hispanics were distinguished only by whether they were U.S. born, because of the limited numbers of non-U.S.-born African Americans in this study. Future research should explore similar issues in specific cultural subgroups, various types of FBOs, and geographic areas.

## Conclusions

FBO leaders and providers should be aware that depressed participants receiving FBO depression care have high levels of need and are likely to be receiving care from other sources. Similarly, health service personnel should be aware that depressed patients from underresourced communities that are largely African American or Hispanic are likely to be receiving mental health services from FBOs. Provisions of the Affordable Care Act are designed to increase partnerships between traditional health care services and community agencies. To make our communities healthy, increased attention should be given to FBO depression services (41). Collaborative efforts between FBOs and traditional mental health services may foster increased access to treatment for African Americans and Hispanics.

## Acknowledgments

The Robert Wood Johnson Foundation Clinical Scholars Program, University of California Los Angeles, CA.

This work was supported by the Robert Wood Johnson Foundation Clinical Scholars Program.

## References

1. Mental Health Basics. Atlanta: Centers for Disease Control and Prevention; 2014. <http://www.cdc.gov/mentalhealth/basics.htm>
2. The State of Mental Health in America. Alexandria, Va: Mental Health America; p. 2013 <http://www.mentalhealthamerica.net/go/state-ranking>
3. Racial/Ethnic Differences in Mental Health Service Use Among Adults. Rockville, Md: Substance Abuse and Mental Health Services; 2015. <http://www.samhsa.gov/data/sites/default/files/MHServicesUseAmongAdults/MHServicesUseAmongAdults.pdf>
4. Unger JB, Cabassa LJ, Molina GB, et al. Evaluation of a fotonovela to increase depression knowledge and reduce stigma among Hispanic adults. *Journal of Immigrant and Minority Health*. 2013; 15:398–406. [PubMed: 22485012]
5. Woodward AT, Taylor RJ, Bullard KM, et al. Use of professional and informal support by African Americans and Caribbean blacks with mental disorders. *Psychiatric Services*. 2008; 59:1292–1298. [PubMed: 18971405]
6. Lee S, Laiewski L, Choi S. Racial-ethnic variation in US mental health service use among Latino and Asian non-US. citizens. *Psychiatric Services*. 2014; 65:68–74. [PubMed: 24081115]

7. Williams DR, González HM, Neighbors H, et al. Prevalence and distribution of major depressive disorder in African Americans, Caribbean blacks, and non-Hispanic whites: results from the National Survey of American Life. *Archives of General Psychiatry*. 2007; 64:305–315. [PubMed: 17339519]
8. Das AK, Olfson M, McCurtis HL, et al. Depression in African Americans: breaking barriers to detection and treatment. *Journal of Family Practice*. 2006; 55:30–39. [PubMed: 16388764]
9. Alegría M, Canino G, Ríos R, et al. Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino whites. *Psychiatric Services*. 2002; 53:1547–1555. [PubMed: 12461214]
10. Bailey RK, Patel M, Barker NC, et al. Major depressive disorder in the African American population. *Journal of the National Medical Association*. 2011; 103:548–557. [PubMed: 21999029]
11. Mendel P, Ngo VK, Dixon E, et al. Partnered evaluation of a community engagement intervention: use of a kickoff conference in a randomized trial for depression care improvement in underserved communities. *Ethnicity and Disease*. 21(3 suppl 1):S1–78.
12. Hankerson SH, Weissman MM. Church-based health programs for mental disorders among African Americans: a review. *Psychiatric Services*. 2012; 63:243–249. [PubMed: 22388529]
13. Woodward AT, Bullard KM, Taylor RJ, et al. Complementary and alternative medicine for mental disorders among African Americans, black Caribbeans, and whites. *Psychiatric Services*. 2009; 60:1342–1349. [PubMed: 19797374]
14. Young JL, Griffith EE, Williams DR. The integral role of pastoral counseling by African-American clergy in community mental health. *Psychiatric Services*. 2003; 54:688–692. [PubMed: 12719499]
15. Chatters LM, Mattis JS, Woodward AT, et al. Use of ministers for a serious personal problem among African Americans: findings from the national Survey of American Life. *American Journal of Orthopsychiatry*. 2011; 81:118–127. [PubMed: 21219283]
16. Wang PS, Berglund PA, Kessler RC. Patterns and correlates of contacting clergy for mental disorders in the United States. *Health Services Research*. 2003; 38:647–673. [PubMed: 12785566]
17. Wang PS, Lane M, Olfson M, et al. Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Archives of General Psychiatry*. 2005; 62:629–640. [PubMed: 15939840]
18. Faith-Based Organizations in Community Development. Washington, DC: Department of Housing and Urban Development, Office of Policy Development and Research; 2001. [http://www.nehands.nebraska.edu/files/Faith\\_Based\\_Community\\_Development.pdf](http://www.nehands.nebraska.edu/files/Faith_Based_Community_Development.pdf)
19. Miranda J, Ong MK, Jones L, et al. Community-partnered evaluation of depression services for clients of community-based agencies in under-resourced communities in Los Angeles. *Journal of General Internal Medicine*. 2013; 28:1279–1287. [PubMed: 23670566]
20. Chung B, Jones L, Dixon EL, et al. Using a community partnered participatory research approach to implement a randomized controlled trial: planning community partners in care. *Journal of Health Care for the Poor and Underserved*. 2010; 21:780–795. [PubMed: 20693725]
21. Wells K, Jones L. “Research” in community-partnered, participatory research. *JAMA*. 2009; 302:320–321. [PubMed: 19602693]
22. Chung B, Ong M, Ettner SL, et al. 12-month outcomes of community engagement versus technical assistance to implement depression collaborative care: a partnered, cluster, randomized, comparative effectiveness trial. *Annals of Internal Medicine*. 2014; 161(suppl):S23–S34. [PubMed: 25402400]
23. Kroenke K, Strine TW, Spitzer RL, et al. The PHQ-8 as a measure of current depression in the general population. *Journal of Affective Disorders*. 2009; 114:163–173. [PubMed: 18752852]
24. Sheehan DV, Lecrubier Y, Sheehan KH, et al. The Mini-International Neuropsychiatric Interview (MINI): the development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal of Clinical Psychiatry*. 1998; 59(suppl 20):22–33.
25. Hosmer, DW., Jr, Lemeshow, S., Sturdivant, RX. *Applied Logistic Regression*. New York: Wiley; 2013.
26. Korn, EL., Graubard, BI. *Analysis of Health Surveys*. New York: Wiley; 2011.

27. Little RJ. Missing-data adjustments in large surveys. *Journal of Business and Economic Statistics*. 1988; 6:287–296.
28. Toutenburg H, Rubin DB. Multiple imputation for nonresponse in surveys. *Statistical Papers*. 1990; 31:180–180.
29. Islam F, Campbell RA. “Satan has afflicted me!” Jinn-possession and mental illness in the Qur’an. *Journal of Religion and Health*. 2014; 53:229–243. [PubMed: 22688386]
30. Payne JS. “Saints don’t cry”: exploring messages surrounding depression and mental health treatment as expressed by African-American Pentecostal preachers. *Journal of African American Studies*. 2008; 12:215–228.
31. Oppenheimer JE, Flannelly KJ, Weaver AJ. A comparative analysis of the psychological literature on collaboration between clergy and mental-health professionals—perspectives from secular and religious journals: 1970–1999. *Pastoral Psychology*. 2004; 53:153–162.
32. Neighbors HW, Musick MA, Williams DR. The African American minister as a source of help for serious personal crises: bridge or barrier to mental health care? *Health Education and Behavior*. 1998; 25:759–777. [PubMed: 9813746]
33. Taylor RJ, Ellison CG, Chatters LM, et al. Mental health services in faith communities: the role of clergy in black churches. *Social Work*. 2000; 45:73–87. [PubMed: 10634088]
34. Hankerson SH, Watson KT, Lukachko A, et al. Ministers’ perceptions of church-based programs to provide depression care for African Americans. *Journal of Urban Health*. 2013; 90:685–698. [PubMed: 23471573]
35. Woodward AT, Chatters LM, Taylor HO, et al. Professional service use for a serious personal problem: comparing older African Americans, black Caribbeans, and non-Hispanic whites using the National Survey of American Life. *Journal of Aging and Health*. 2015; 27:755–774. [PubMed: 25552527]
36. Kessler RC, Soukup J, Davis RB, et al. The use of complementary and alternative therapies to treat anxiety and depression in the United States. *American Journal of Psychiatry*. 2001; 158:289–294. [PubMed: 11156813]
37. Hodgkin D, Volpe-Vartanian J, Alegría M. Discontinuation of antidepressant medication among Latinos in the USA. *Journal of Behavioral Health Services and Research*. 2007; 34:329–342. [PubMed: 17570068]
38. Cooper LA, Gonzales JJ, Gallo JJ, et al. The acceptability of treatment for depression among African-American, Hispanic, and white primary care patients. *Medical Care*. 2003; 41:479–489. [PubMed: 12665712]
39. Givens JL, Katz IR, Bellamy S, et al. Stigma and the acceptability of depression treatments among African Americans and whites. *Journal of General Internal Medicine*. 2007; 22:1292–1297. [PubMed: 17610120]
40. Allem JP, Lisha NE, Soto DW, et al. Emerging adulthood themes, role transitions and substance use among Hispanics in Southern California. *Addictive Behaviors*. 2013; 38:2797–2800. [PubMed: 24018219]
41. Population Health Implications of the Affordable Care Act: Workshop Summary. Washington, DC: National Academies Press; 2014.

Characteristics of 947 study participants, by whether they reported attending a religious place and whether they received depression care from a faith-based organization (FBO)<sup>d</sup>

TABLE 1

Characteristic	Attended a religious place												Group test <sup>b</sup>				
	Did not attend a religious place (a)				Did not receive FBO depression care (b)				Received FBO depression care (c)					P			
	N	%	N	%	N	%	N	%	N	%	(c) vs. (a)	(c) vs. (b)			$\chi^2$	df	p
<b>Total</b>	<b>(N=382)</b>				<b>(N=342)</b>				<b>(N=223)</b>								
	45.7±12.8		45.8±13.5		46.8±12.6		43.9±11.7										
Age (M±SD)																	
Female	561	58	210	53	204	58	147	65	204	58	147	65	.189	.011	8.7	2	.013
Married or living with a partner	219	23	79	20	82	24	59	27	82	24	59	27	.068	.284	4.5	2	.105
Less than high school education	417	44	175	46	155	45	87	39	155	45	87	39	.096	.9	4	2	.134
Working for pay	192	20	71	19	74	21	48	21	74	21	48	21	.248	.384	2.5	2	.289
Race-ethnicity by U.S.-born status																	
Non-U.S.-born Hispanic	250	27	74	20	111	33	65	30	111	33	65	30	<.001	.043	33.1	6	<.001
U.S.-born Hispanic	144	15	69	18	51	15	24	11	51	15	24	11					
African American	469	48	194	49	153	43	122	54	153	43	122	54					
Non-Hispanic white	84	10	45	13	27	9	11	5	27	9	11	5					
Visits to a religious place in past 6 months (M±SD)	13.9±25.3		0		20.5±27.7		27.5±30.9		20.5±27.7		27.5±30.9		<.001	.004	279.4	2	<.001
3 chronic general medical conditions (from list of 18)	506	54	197	53	180	54	130	59	180	54	130	59	.285	.503	2.3	2	.324
Mental disorder																	
Major depression episode, current	400	42	165	43	123	36	111	50	123	36	111	50	.233	.002	10.8	2	.005
Mania, lifetime	188	20	70	18	54	16	64	28	54	16	64	28	.038	.003	10.5	2	.005
Anxiety disorder, current or recent	450	47	183	47	148	44	120	53	148	44	120	53	.225	.047	5.3	2	.071
Lifetime diagnosis of or hospitalization for psychosis	296	31	130	34	88	26	79	35	88	26	79	35	1	.028	6.8	2	.033
Medication in past 6 months																	
Antidepressant	289	30	123	32	89	26	77	35	89	26	77	35	1	.086	5.3	2	.069
Antianxiety	97	10	39	10	27	8	32	15	27	8	32	15	.235	.011	7.8	2	.02
Any psychiatric	362	38	150	39	115	34	97	44	115	34	97	44	.657	.033	7.0	2	.03

Characteristic	Attended a religious place												Group test <sup>b</sup>				
	Did not attend a religious place (a) (N=382)				Did not receive FBO depression care (b) (N=342)				Received FBO depression care (c) (N=223)				p		$\chi^2$	df	p
N	%	N	%	N	%	N	%	N	%	(c) vs. (a)	(c) vs. (b)						
Mental health care use in past 6 months																	
Outpatient mental health	546	57	221	57	188	55	136	61	136	.793	.331	1.9	2	.379			
Outpatient primary care for depression	396	42	139	37	143	42	114	52	114	.001	.048	11.7	2	.003			
Substance abuse visit with mental health service	228	24	86	22	71	20	71	32	71	.145	.038	5.5	2	.064			
Emergency room visit for alcohol, drug, or mental health problems	255	27	90	23	82	24	83	37	83	<.001	.002	22.0	2	<.001			

<sup>a</sup>Data were multiply imputed at the item level. Percentages and means were weighted to the sample eligible for enrollment and survey response. Percentages may not sum to 100% because of rounding.

<sup>b</sup>Based on a Wald chi-square test for comparing differences across three categories and accounting for clustering (clients within programs). Adjusted p value for pairwise comparisons using the Bonferroni procedure

Multinomial logistic regression of variables as predictors of receipt of depression care from a faith-based organization (FBO)<sup>a</sup>

TABLE 2

Variable	Did not attend a religious place			Attended a religious place but did not receive FBO depression care		
	OR	95% CI	p	OR	95% CI	p
Age <sup>b</sup>	1.17	1.01–1.35	.042	1.22	1.04–1.44	.016
Female (reference: male)	.68	.43–1.07	.094	.75	.49–1.13	.166
Race-ethnicity by U.S.-born status (reference: non-Hispanic white)						
Non-U.S.-born Hispanic	.23	.10–.54	.001	.59	.28–1.24	.163
U.S.-born Hispanic	.86	.36–2.05	.731	1.16	.49–2.71	.733
African American	.45	.21–.97	.041	.58	.28–1.19	.133
Mania, lifetime (reference: none)	.59	.37–.94	.026	.56	.36–.88	.012
Any outpatient primary care for depression (reference: none)	.60	.41–.89	.011	.75	.53–1.07	.107
Any substance abuse visit with mental health service (reference: none)	.59	.35–1.00	.049	.60	.33–1.07	.083
Any emergency room visit for alcohol, drug and mental health problems (reference: none)	.65	.45–.93	.019	.72	.47–1.10	.128

<sup>a</sup>The odds ratios reflect the comparison with those who received FBO depression care. For example, non-U.S.-born Hispanics who did not attend a religious place were significantly less likely (p<.001) than non-Hispanic whites who did not attend a religious place to receive FBO depression care. The analysis used multiply imputed data, weighted for attrition to the eligible sample and accounted for clustering (clients within programs).

<sup>b</sup>ORs for age reflect a 10-year point increase.

**TABLE 3**

Multiple logistic regression of variables as predictors of receipt of depression care from a faith-based organization among 565 participants who attended a religious place<sup>a</sup>

Variable	OR	95% CI	p
Age <sup>b</sup>	.76	.64–.91	.002
Female (reference: male)	1.48	1.00–2.21	.051
Race-ethnicity by U.S.-born status (reference: non-Hispanic white) <sup>c</sup>			
Non-U.S.-born Hispanic	1.56	.73–3.34	.248
U.S.-born Hispanic	.94	.38–2.30	.887
African American	2.06	1.00–4.27	.051
N visits to a religious place in past 6 months	1.01	1.01–1.02	<.001
Major depression episode, current (reference: none)	1.70	1.15–2.51	.008
Mania, lifetime (reference: none)	1.91	1.17–3.11	.010
Antianxiety medication (reference: none)	1.86	1.02–3.38	.044

<sup>a</sup>The analysis used multiply imputed data, weighted for attrition to the eligible sample and accounted for clustering (clients within programs).

<sup>b</sup>ORs for age reflect a 10-year point increase.

<sup>c</sup>Overall test:  $\chi^2=11.7$ ,  $df=3$ ,  $p=.008$