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Mental health care preferences among low-income and minority women

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Abstract

Mental health care preferences are examined among 1,893 low-income immigrant and U.S.-born women with an acknowledged emotional problem (mean age=29.1, SD=89.6). Ethnicity, depression, somatization, and stigma are examined as they relate to mental health care preferences (medication, individual and group counseling, faith, family/friends). Seventy-eight percent of participants counseling would be helpful; 55%; group counseling; and 32% medication. Faith was cited by 81%; family and friends were endorsed by 65%. Minorities had lower odds than Whites of endorsing medication (Black immigrants: OR=0.27, $p<0.001$, U.S.-born Blacks: OR=0.30, $p<0.001$, immigrant Latinas: OR=0.50, $p<0.01$). Most minorities also had higher odds of endorsing faith compared to Whites (Black immigrants: OR=3.62, $p<0.001$; U.S.-born Blacks, OR=3.85, $p<0.001$; immigrant Latinas: OR=9.76, $p<0.001$). Being depressed was positively associated with endorsing medication (OR=1.93, $p<0.001$), individual counseling (OR=2.66, $p<0.001$), and group counseling (OR=1.35, $p<0.01$). Somatization was positively associated with endorsing medication (OR=1.29, $p<0.05$) and faith (OR=1.37, $p<0.05$). Stigma-concerns reduced the odds of endorsing group counseling (OR=0.58, $p<0.001$). Finally, being in mental health treatment was related to increased odds of endorsing medication (OR=3.88, $p<0.001$) and individual counseling (OR=2.29, $p=0.001$).

Keywords

Minority women; Depression; Treatment preferences; Stigma

Ethnic minorities are less likely to receive needed mental health care than White Americans (U.S. Public Health Service 2001). As such, efforts to understand the underutilization of mental health services by poor young women, particularly minorities, are important. Impoverished young women are at high risk for depression and other psychiatric disorders (Kessler et al. 2003, 2005a, b), and ethnic minority women are over-represented among the poor (U.S. Census Bureau 2001). A number of efficacious medications and psychotherapies for depression and other psychiatric disorders can result in improvements in women's symptoms. Yet, our knowledge of patient help-seeking preferences among impoverished, immigrant and U.S.-born Black and Latina women is very limited.

Research on treatment preferences has primarily focused on primary care and patients. This literature shows a strong overall preference among patients of different ethnic backgrounds for psychosocial treatments compared to medication (Cooper et al. 2003; Dwight-Johnson et al. 2000; Lowe et al. 2006; van Schaik et al. 2004). Survey studies of ethnic differences in primary care settings find that compared to White patients, African Americans and Latinos are less likely to indicate a preference for medication (Cooper et al. 2003; Dwight-Johnson et al. 2000). African Americans are also less likely than Whites to indicate preference for counseling (Cooper et al. 2003). In addition, there is some indication from qualitative research that African Americans, compared to Whites, more readily turn to spirituality as a means of dealing with mental health problems (Cooper-Patrick et al. 1997).

These studies of primary care patients, while informative, do not provide insight into the mental health care attitudes of impoverished populations, particularly uninsured or publicly insured women who may not have a regular primary care provider. Existing survey studies of Black and Latina women seen in public medical or OB/GYN settings have shown an overwhelming interest in mental health services among women who are depressed or perceive that they have an emotional problem (Alvidrez and Azocar 1999; Arean and Miranda 1996); however, studies of their preferences are limited. One small study that examined treatment preferences among Black, Latina, and White women seen in public OB/GYN settings found that women most often indicated interest in individual therapy and psychoeducational classes about general health, followed by group counseling, prevention programs, and mood management classes. Medication was the least desirable treatment option (Alvidrez and Azocar 1999). This study did not detect ethnic differences between minorities and Whites in treatment preferences, and did not examine differences in mental health care preferences by immigration status.

We also know relatively little about what predicts poor, minority women's preferences for medication and counseling, as well as their beliefs about the utilization of faith and family as sources of mental health care. Although study results are inconsistent, there is evidence to suggest that minority groups in the U.S. exhibit higher levels of stigma than U.S.-born Whites (Alvidrez 1999; Alvidrez and Azocar 1999; Cooper-Patrick et al. 1997; Nadeem et al. 2007). Similar patterns have been observed among Caribbean immigrants to the UK and Africans in Nigeria (Adewuya and Makanjuola 2005; Edge et al. 2004; Edge and Rogers 2005; Schreiber et al. 2000). Concerns about stigma may impact the modes of mental health care that women express interest in or ultimately pursue. Research in this area is limited, but one small survey study found that women seeking public services with stigma-related barriers to care were more interested in medication than those who did not experience such stigma (Alvidrez and Azocar 1999). A focus group study of general medical patients found that stigma concerns among both White and African American patients may lead to reluctance in turning to family and friends for support (Cooper-Patrick et al. 1997).

Women's current symptomatology may also impact their attitudes about mental health care. In this investigation we focus specifically on depression because of the high rates of depression among impoverished women (Kessler et al. 2003). Although prior research has not found a

strong association between having a diagnosis of depression and preference for specific treatments in the primary care setting (Dwight-Johnson et al. 2000), the question has not been examined in low-income minority women. Somatic complaints may also have implications for the way in which women think about their treatment. Somatization is thought to be of particular relevance to ethnic minority and immigrant communities (Kirmayer and Young 1998). Among African women, somatic complaints are thought to eclipse depressive symptoms (Makanjuola and Olaifa 1987; Otote and Ohaeri 2000). Prior research examining treatment usage in a community sample of individuals with psychiatric disorders demonstrates that individuals with mental health difficulties who also have significant somatic symptoms are more likely to seek medical treatments, and individuals without somatic symptoms are more likely to seek specialty mental health care (Escobar et al. 1987).

The current study builds on the literature by exploring mental health care preferences among U.S.-born White women, and U.S.-born and immigrant Black and Latina women who perceive a need for help with an emotional problem. We focus this investigation on low-income women served in country entitlement settings, in order to provide understanding of mental health care preferences among groups of low-income women in underserved and understudied communities. The goals of the study are to examine ethnic and immigrant group differences in women's preferences for a broad range of mental health care options including medication, individual treatment, group counseling, family and friends, and faith as means to cope with an emotional problem. We also examine stigma, depression, and somatization as predictors of interest in the different types of treatment and coping resources.

Materials and methods

Participants

Participants were a subset of a larger sample of 15,383 low-income immigrant and nonimmigrant women who were screened for the Women Entering Care (WE Care) treatment of depression study (Miranda et al. 2003,2006). All women were asked the same survey questions. The sample used in the current study ($N=1,893$) included women from this group with perceived mental health problems in the past year. Specifically, we included those who responded yes to the question, "Have you had severe enough personal, emotional, behavior, or mental problems in the past 12 months that you needed help" and responded yes to one or more descriptions of these problems: "depression", "feeling low", "anxiety", "panic", "nerves." This sample is of women who perceive that they need help and define their problem as mental health in nature.

Participating women were screened primarily in the Women Infants and Children (WIC) program, a program that provides nutritional services to low-income pregnant and post partum women and their children (up to age five). Women were also screened in county-run Title X family planning clinics, which provide comprehensive family planning services for low-income women, in pediatric clinics, and via a subsidized housing project or attending program for welfare recipients. All participants provided written informed consent in either English or Spanish. Immigrant Black women served in these settings were English-speaking. Immigrant Latina women were primarily Spanish-speaking. Seventy-three percent of the immigrant Latina women were from Central America (e.g., El Salvador, Guatemala, Nicaragua), 20% were from South America (e.g., Chile, Bolivia), with the remainder from the Caribbean or North America. Specific country of origin information was not available for immigrant Black women, who were from Africa ($n=71$) or the Caribbean ($n=30$). Of the all the women approached, only 8.8% refused participation. Research procedures were reviewed and approved by the institutional review boards of Georgetown University, the State of Maryland, and the University of California, Los Angeles.

Measures

All measures were administered in a personal interview format by WE Care project staff in the participants' preferred language (English or Spanish) at each of the different service settings described above.

Mental health care preferences—Participants who indicated that they felt that they had an emotional problem for which they needed help responded to a question asking them “Do you think these problems could be helped with any of the following?” and were asked to respond in a yes/no format to “medication”, “individual counseling”, “group counseling”, “family and friends support”, and “faith”. The categories were not mutually exclusive.

Depression—The Primary Care Evaluation of Mental Disorders (PRIME-MD) (Spitzer et al. 1994) was used to identify women with symptoms consistent with major depression. The PRIME-MD's questions are based on DSM-IV criteria and the measure demonstrates good agreement with independent psychiatric diagnoses made using a structured interview (92%). The PRIME-MD has also been used with ethnic minority populations (Spitzer et al. 1994).

Stigma-related concerns about care—A stigma variable was created from three yes/no items in response to the query, “Would any of the following keep you from getting professional help?” Participants were categorized as having stigma-related concerns if they endorsed one or more of the following: “being embarrassed to talk about personal matters with others”, “being afraid of what others might think”, and “family members might not approve.” These items were taken from the work of Sussman et al. (1987).

Somatization—Participants were classified as somatizers if they reported six or more DSM-IV symptoms of somatization disorder, based on the abridged somatization construct developed by Escobar et al. (1987). The measure was tested in a mixed ethnicity population and was shown to discriminate between those who did and did not have somatization, and had good construct validity (Escobar et al. 1987).

Demographics and experience with mental health treatment—Participants provided demographic information including age, marital status, employment status, insurance status, number of children, education, and years in the U.S. Information regarding ethnicity and country of origin and immigrant status were obtained via the following two items, “What is your cultural or ethnic identity?” and “Where were you born?”. Participants also indicated whether they were “currently receiving mental health treatment” by answering a simple yes/no item.

Analysis

Simple descriptive statistics were used to characterize the samples. In order to examine the relations between sociodemographic characteristics, stigma, depression, somatization, and treatment preferences, we conducted a series of logistic regressions using ethnicity, stigma, depression, somatization, and the interactions between ethnicity and each of these variables to predict each treatment preference variable, controlling for sociodemographic variables. The alpha level for the study was set at $p < 0.05$. Due to the exploratory nature of study, we did not include corrections for multiple comparisons. Because none of the interaction models were significant, we only present main effects models. Interpretation of all odds ratios in these models assumes all other variables in the model are held constant.

Results

Sample characteristics

Sample characteristics are presented in Table 1. The sample consists of 33 (1.7%) U.S.-born Latinas, 736 (39%) immigrant Latinas, 873 (46%) U.S.-born Black, 101 (5.3%) immigrant Black (African and Caribbean), and 153 (7.7%) U.S.-born White women. The women are relatively young ($M=29.1$, $SD=8.6$), almost half are married or living with a partner, and about 35% did not complete high school. Seven percent of the women graduated from college. Fifty-seven percent of women are uninsured and 21% have medical assistance. On average, the immigrants had been in the United States 8.9 years. Overall, 45% ($n=860$) of our sample met criteria for depression. Rates of depression were lower in the African immigrant group relative to the White group ($p<0.001$ in chi-square test), but were comparable in all other ethnic groups. An additional 26.5% of the women in the study had subthreshold or minor depression (two to four symptoms of depression) as assessed on PRIME-MD (e.g., Williams et al. 2000).

In addition, 55% ($n=1,034$) of the sample reported significant somatic complaints, with no differences between minority groups and US-born Whites. Almost 30% of the sample ($n=560$) cited stigma-related barriers to care. Black immigrants were more likely to endorse stigma-related barriers to care than U.S.-born Whites (42% vs. 27%), however, differences in stigma between Whites and other minority groups were not as pronounced.

In general, faith and individual counseling were viewed by the greatest number of women as being helpful for addressing an emotional problem, with 82% of women endorsing faith and 81% of women endorsing individual counseling. Sixty-five percent of women indicated that talking to family and friends would help with an emotional problem, where as 56% endorsed group counseling, and only 33% expressed interest in medication.

Overall rates of mental health service usage (i.e., being in any form of mental health treatment) in the sample were low. Only 10% of the sample ($n=194$) was in any kind of mental health treatment. US-born Whites were most likely to be in mental health treatment (30%), followed by US-born Blacks (13%). Rates of treatment usage in immigrant groups were less than five percent. Of those in treatment, half ($n=96$) received medication, 63% ($n=122$) received individual therapy, 16% ($n=30$) were in family therapy, and 13% ($n=25$) were in group therapy. Discrepancies in mental health treatments between US-born Whites and minorities were most pronounced in medication usage. Seventeen percent of the US-born Whites were taking medication, versus fewer than 7% of any other minority group ($p<0.001$ for pairwise Fisher's exact tests in all groups but US-born Latinas).

Predictors of treatment preferences

Tables 2 and 3 depict logistic regression models predicting interest in medication, individual counseling, group counseling, family/friends and faith from ethnicity, depression, stigma, and somatization, controlling for demographic characteristics and whether or not they were currently in treatment. Interpretation of all odds ratios assumes adjustment for all of the covariates in the model.

Medication—There was an overall effect of ethnicity in predicting preference for medication ($p<0.001$). With the exception of U.S.-born Latinas, all of the minority groups has significantly lower odds than U.S.-born White women of reporting that medication would help them with an emotional problem (Black immigrants: $OR=0.27$, $p<0.001$, U.S.-born Blacks: $OR=0.30$, $p<0.001$, immigrant Latinas: $OR=0.50$, $p<0.01$). These results are consistent with the raw frequencies in Table 1. Specifically, 57% of White women indicated that medication would be

helpful, compared to 39% of immigrant Latinas, 34% of U.S.-born Latinas, 26% of U.S.-born Blacks, and only 19% of African immigrants.

In addition, women with major depression had greater odds of indicating that medication would be helpful compared to those without depression ($OR=1.93, p<0.001$). Being a somatizer increased the odds of endorsing medication as a helpful treatment compared to those with few somatic complaints ($OR=1.29, p<0.05$), as did being in mental health treatment ($OR=3.88, p<0.001$). Stigma was not significantly associated with preference for medication.

Individual counseling—There was also an overall effect of ethnicity on preference for individual counseling ($p<0.01$) indicating that immigrant Latinas had higher odds of endorsing individual counseling than White women ($OR=1.88, p<0.05$). Women with major depression had higher odds than those without major depression of reporting that individual counseling would be helpful for their problems ($OR=2.67, p<0.001$). A similar pattern was observed for women who were currently in mental health treatment compared to those who were not ($OR=2.29, p<0.001$). Somatization, stigma, and current treatment status were not significantly related to endorsement of individual counseling.

Group counseling—There was an overall ethnicity effect for group counseling ($p<0.001$). Compared to U.S.-born White women, immigrant Latinas had higher odds of indicating that group counseling would be helpful for their problems ($OR=2.33, p<0.001$; raw frequency of endorsement for Latinas vs. Whites: 63% versus 49%). No other ethnic groups differed significantly from U.S.-born Whites. Consistent with our findings related to medication and individual counseling, depressed women had higher odds of indicating an interest in group counseling ($OR=1.35, p<0.01$) than non-depressed women. In addition, women who cited stigma concerns had lower odds of endorsing group counseling ($OR=0.58, p<0.001$) than those who did not have stigma concerns. Somatization and current treatment status were not significantly related to preference for group counseling.

Faith—There were ethnic differences in the extent to which the ethnic groups felt that faith would be helpful in dealing with an emotional problem ($p<0.001$). With the exception of U.S.-born Latinas, each of the minority groups had higher odds of reporting that faith would be helpful in dealing with an emotional problem than White women (Black immigrant women: $OR=3.62, p<0.001$; U.S.-born Black women, $OR=3.85, p<0.001$; immigrant Latina women: $OR=9.76, p<0.001$). These are consistent with unadjusted proportions of each ethnic group endorsing faith (Table 1.) Specifically, only 52% of White women endorsed faith, compared to 80% of U.S.-born Blacks, 82% of immigrant Blacks, and almost 91% of immigrant Latinas. Interestingly, women who somatized had higher odds of indicating that faith would be helpful compared to non-somatizers ($OR=1.37, p<0.05$). Depression, stigma, and current treatment status were not significantly associated with participants' endorsement of faith as a way helping with emotional problems.

Family and friends—None of our variables of interest differentiated between those who thought family and friends would be helpful in dealing with an emotional problem, and those who did not.

Discussion

The present study sought to examine preferences for mental health treatment among low-income immigrant and U.S.-born women seeking service from county entitlement programs who perceived need for help with an emotional or mental health problem. Forty-five met criteria for depression and 66% reported significant somatic complaints, indicating that many women in this sample are in need of mental health services. However, only 10% of the women were

in mental health treatment. This finding stands in contrast with recent analysis of a national sample indicating that about 40% of adults in the United States with psychiatric disorders receive some kind of care (Wang et al. 2005), however, it is consistent with research reporting that ethnic minorities are particularly unlikely to get care (U.S. Public Health Service 2001). Fewer than 9% of U.S.-born Latinos seek mental health care from mental health settings, and fewer than 20% seek such care in general health care settings, with immigrant Latinos being particularly unlikely to get mental health treatment (Vega et al. 1999). These findings underscore the importance of studying the mental health care preferences of low-income and immigrant women, and speak to the significant logistical barriers to care faced by low-income populations in accessing care (Nadeem et al. 2007). Interestingly, the general patterns in treatment preferences that we observed were consistent with research conducted in primary care and general medical settings (Cooper-Patrick et al. 1997). Many women indicated that active mental health treatment, particularly individual counseling, would be helpful to their problems. This was endorsed with far more frequency than medication and group counseling (78% compared to 32% and 55%, respectively). Strikingly, faith was cited by 81% of women as a way their problems could be helped, followed by support from friends and family, which was endorsed by 65% of all women.

Meaningful ethnic differences in treatment preferences also emerged. Consistent with the work of others (Alvidrez and Azocar 1999; Cooper et al. 2003), almost all ethnic minorities were significantly less likely to indicate interest in medication than were U.S.-born White women, controlling for depression, somatization, and demographic variables. Relative to U.S.-born Whites, Black immigrants had 0.27 times the odds, U.S.-born Blacks had 0.30 times the odds, and immigrant Latinas had 0.50 times the odds of believing that medication could help their problems. While U.S.-born Latinas did not differ significantly from Whites, this group's sample size was smaller, and the general trend was in the same direction. Because not all of the women in the study met criteria for depression, it would not be expected that medication would be recommended by practitioners in many of these cases. Even so, it is clear that ethnic minority women may have some concerns about the utility of or the negative consequences associated with taking medications to help with emotional problems. There is evidence that U.S. born and immigrant Black women have concerns and lack of trust in the medical system (Edge et al. 2004; Halbert et al. 2006; Hutchinson and Gilvarry 1998), which may partially explain this finding.

With the exception of our findings for immigrant Latinas, there was less indication of ethnic variation in endorsement of individual counseling compared with that of medication. Unadjusted rates of individual counseling endorsement were significantly different only in Black immigrants (68%) relative to U.S.-born whites (81%). However, overall rates of depression were lower among Black immigrants and models adjusting for depression status, somatization, and demographic variables were less suggestive of ethnic variation. Over two-thirds of the women in our study viewed individual counseling as helpful for dealing with emotional problems. Health and mental health professionals interfacing with low-income women who are facing significant emotional problems, should be aware that many women are likely to be open to referrals for individual therapy. The finding also strengthens the case for bringing evidence-based psychotherapies to low-income communities who are likely to be receptive.

There were interesting ethnic group differences in the endorsement of group therapy as a helpful source of care. Unadjusted rates of group therapy endorsement were highest among immigrant Latinas (65%), who were significantly more likely to indicate that group would be helpful compared to U.S.-born Whites (50%). The difference remained significant in models adjusting for depression, somatization, and demographics. This finding may reflect interest among immigrant Latinas for mutually supportive relationships with others who are coping with

similar problems. While group counseling remains less desirable than individual counseling for the Latina women in our study, groups may still be another viable treatment option. This ethnic difference may also be reflective of a more general feeling among immigrant Latinas that therapy is more helpful than is typically assumed. Indeed, our logistic regression models indicated increased odds of endorsement of individual treatment among immigrant Latinas compared with Whites. These findings are consistent with the work of Cooper et al. (2003) who found that Latinos in general medical settings had higher odds of finding counseling acceptable than Whites.

With the exception of U.S.-born Latinas, a pronounced difference in the endorsement of faith-based solutions for mental health problems was found between U.S.-born White women and the other ethnic minority groups. Only 54% of U.S.-born Whites indicated that faith would be helpful in dealing with their perceived emotional problem, compared with about 90% of immigrant Latinas, 82% of immigrant Black women, and 79% of U.S.-born Black women. Such patterns were also evident in our regression models. These findings highlight the value of partnering with faith-based organizations in order to bring effective mental health treatment to low-income minority women. They also make the case for incorporating faith and spirituality into existing mental health treatments for low-income minority women. The current research extends findings from qualitative research that African American primary care patients were more likely than Whites to place importance on spirituality as a coping mechanism (Cooper-Patrick et al. 1997), and suggests that this also applies to immigrant African and Caribbean women and immigrant Latinas. The lack of difference between U.S.-born Latinas and Whites in this domain is interesting and should be explored in future research. Possible hypotheses about why U.S.-born Latinas appeared more similar to U.S.-born Whites may have to do with acculturation processes, specific practices and traditions in the religious settings these groups frequent, or beliefs about the role of faith in one's life.

Not surprisingly, women with depression were more likely to endorse active treatment methods compared those without depression. Logistic models adjusting for demographics indicated that compared with the non-depressed, women with depression had 1.93 higher odds of endorsing medication, 2.66 higher odds of endorsing individual therapy, and 1.35 higher odds of endorsing group therapy. These findings suggest that depressed women have a fairly accurate sense that active mental health treatments will be most effective in helping them with their problems. While family and faith may be viewed as important coping resources, these women recognize that they may need specific interventions geared towards alleviating their symptoms. Similarly, women with experience with formal mental health treatment were more likely to endorse medication and individual treatment as helpful options for dealing with their problems. The number of women in treatment in the current study was too small to sufficiently examine whether experience with specific types of mental health treatment is related to mental health care preferences, however, this is an important area for further research.

Interestingly, compared to non-somatizers, somatizers had significantly higher odds of indicating that both medication and faith could help with their emotional problems. The finding regarding medication is consistent with the theory that individuals whose problems manifest physically may gravitate towards a more biomedical intervention model. However, the positive association between somatization and interest in faith suggests the need to examine alternative conceptualizations. For example, individuals who are more faithful or view faith-settings as a source of mental health care may be more likely to manifest their distress somatically. Overall, our data suggests that those individuals who somatize are open to interventions of many types, particularly medications and spiritual help. Practitioners should be aware of these preferences and attend to the fact that many impoverished women of diverse backgrounds have significant somatic complaints (66% of the current sample) that can co-occur with mood problems.

Discussion of physical symptoms may be an entrée in talking emotional problems more explicitly.

Stigma-related concerns did not play a significant role in predicting treatment preferences, with the exception of group therapy. Stigma-concerns reduced the odds of indicating that group treatment would be helpful. Group therapy may offer a mode of social support and can be effective in treating depression and other psychiatric disorders. However, it is clear that women have some concerns about feeling stigma that could prevent them from seeking such options. In many close-knit communities, particularly among recent immigrant groups, there can be significant concerns about others in the community knowing about personal matters, and many people may feel more comfortable disclosing to someone outside of their community. Efforts to explore stigma concerns, better explicate confidentiality procedures, and educate patients about the value of group therapy may be helpful. However, it is also important to consider contextual factors that could lead to stigmatization of women seeking such treatments, be sensitive to women's realistic concerns when setting up groups, and being thoughtful about how confidentiality can be ensured. In addition, it is possible that some of the stigma items could be capturing more general feelings of shyness or discomfort with being in groups, which may also explore why stigma was only associated with preference for group therapy but not individual treatments.

The use of family and friends as a coping method was endorsed similarly across ethnic groups, and was not predicted by depression, somatization, or stigma in the current study. In fact, the majority of women in all ethnic groups felt that their problems could be helped by family and friends. It is interesting that women with depression and somatization were not more likely than their counterparts to feel that family and friends would be helpful, given that they were more interested in the active treatment options like counseling or medication. The finding is consistent with qualitative research with African American and White medical patients who indicated that there may some limitations on how effective family and friends would be in helping with depression (Cooper-Patrick et al. 1997). However, because poor women are so open to help from family and friends, community education about depression and depression care could certainly help these women obtain the support they need from family and friends.

The lack of association between family support and stigma suggests that low-income women might be open to this sort of communication.

There are several limitations to the study that are important to consider. First, the study was cross-sectional, limiting the conclusions that could be made about direction of effects. Sample sizes for some of the cells were relatively small, making it important to interpret our non-significant findings related to interaction effects with some caution. In addition, our survey items are limited in their ability to fully understand complex help-seeking processes in that the women in this study were asked to indicate what they thought would help their problems, and not what they actually did to deal with their problems. Although we do not know whether women pursued the various mental health care options examined, the study provides us with a better understanding of the low-income women's attitudes and beliefs about how mental health problems might be helped. Future research could elucidate specific help-seeking pathways. Finally, our study did not specify relations between variables based on countries of origin in part because of limited sample size. It is important to consider that not all Latino, African, and Caribbean cultures are the same. However, research conducted with various Latino cultural groups, for example, reveals similarities in key values, such as reliance on family (Sabogal et al. 1987), that influence help-seeking processes. Additionally, our study used immigrant status as the primary method to distinguish between those who had greater or less exposure to mainstream U.S. culture and services systems. However, we recognize the importance of viewing acculturation and immigration as multifaceted processes. Nonetheless,

the present study is the first of its kind to include a sample rich in ethnic diversity, and to explore differences among immigrant and non-immigrant women of Latina, African, and Caribbean backgrounds.

Using a large and diverse sample of depressed women, the present study provides us with useful insights into the mental health care preferences of low-income White women and U.S.-born and immigrant Black and Latina women. In general, these women, all of whom perceived that they have a significant emotional problem for which they needed help, showed strong preferences for individual and group counseling over medication. Those with depression were more likely to deem these options as helpful compared to those without depression. Women with somatization, interestingly, had higher odds of indicating interest in medication and faith as sources of mental health care. Ethnic differences were most pronounced regarding medication preferences, with all ethnic minorities indicating less interest in medication than U.S.-born White women. It is also noteworthy that the majority of our ethnic minority groups cited faith as a helpful way of addressing an emotional problem. Together, these findings demonstrate the importance of understanding community attitudes about mental health care, as knowing about different sources of care can help us to better structure services to integrate community members' preferences.

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Table 1

Sample characteristics

Variable	All (N=1,893) %	US white (n=145) %	Immigrant Black (n=101) %	US Black (n=873) %	Immigrant Latina (n=736) %	US Latina (n=33) %	Test statistic (p value) ^a
Marital status							248.50 (p<0.001)
Married/living with partner	47.2	40.0	54.5 ^{***}	29.7 ^{***}	68.6 [*]	45.5	
Widowed/separated/ divorced	16.6	24.1	22.8	18.3	12.1 [*]	18.2	
Never married	36.1	35.9	22.8 ^{***}	51.9 [*]	19.0 [*]	36.4	
Education							485.17 (p<0.001)
Below high school	33.5	23.5	7.9 ^{**}	15.6 ^{***}	60.7 [*]	27.3	
High school graduate	36.6	44.8	27.7 ^{**}	46.7	24.7 [*]	24.2 ^{***}	
Some college	22.9	26.9	39.6 ^{***}	30.8	9.4 [*]	45.5 ^{***}	
College graduate	6.9	4.8	24.8 [*]	7.0	5.0	3.0	
Insurance status							356.71 (p<0.001)
No insurance	57.7	53.1	46.5	38.2 [*]	83.7 [*]	54.6	
Medical assistance	21.2	23.5	18.8	32.4 ^{***}	7.6 [*]	27.3	
Private insurance	20.6	23.5	32.7	29.2	8.3 [*]	18.2	
Age (mean±SD)	29.1±8.6	29.1±9.3	31.6±6.6 ^{***}	29±9.1	29.1±8	26.1±7	3.37 (p=0.01)
Years in the US (mean±SD)	8.9±8.4	N/A	11±8.8	N/A	8.6±8.3	N/A	7.56 (p=0.006)
Number of children (mean±SD)	2.1±1.4	1.5±1.2	2.5±1.4 [*]	2.1±1.6 [*]	2.1±1.3 [*]	2±1.2 ^{***}	7.61 (p<0.001)
Meets criteria for MDD	45.4	50.3	21.8 [*]	47.7	45.0	45.5	26.12 (p<0.001)
Meets criteria for clinical somatization	54.6	55.9	46.5	50.8	59.8	60.6	16.32 (p=0.003)
Currently receiving mental health treatment	10.3	29.9	5.0 [*]	12.8 [*]	4.4 [*]	9.1 ^{***}	110.60 (p<0.001)
Taking psychiatric medication ^b	5.1	17.9	2.0 [*]	6.0 [*]	1.8 [*]	6.1	70.27 (p<0.001)
In group treatment ^b	1.3	3.5	1.0	1.8	0.3 ^{***}	3.0	14.93 (p=0.06)
In individual treatment ^b	6.5	14.5	3.0 ^{**}	8.9 ^{**}	2.5 [*]	6.1	45.79 (p<0.001)
In family treatment ^b	1.6	4.1	1.0	2.2	0.5 [*]	0	13.83 (p=0.008)
In other treatment ^b	0.7	1.4	1.0	1.0	0.1 [*]	3.0	7.88 (p=0.10)

Variable	All (N=1,893) %	US white (n=145) %	Immigrant Black (n=101) %	US Black (n=873) %	Immigrant Latina (n=736) %	US Latina (n=33) %	Test statistic (p value) ^a
Stigma related barriers to care							
Any stigma related barrier	29.6	26.9	41.6 ^{***}	25.5	33.6	24.2	20.51 (p<0.001)
Afraid of what others would think	17.6	13.1	32.7 [*]	14.1	20.7 ^{***}	15.2	30.01 (p<0.001)
Embarrassed to talk about personal matters	18.2	15.2	25.7 ^{***}	15.8	20.8	12.1	12.20 (p=0.02)
Family members might not approve	11.2	10.3	13.9	8.8	13.7	12.1	10.82 (p=0.03)
Endorsement of types of care							
Medication	32.9	56.7	18.8 [*]	25.8 [*]	38.6 [*]	34.4 ^{***}	75.28 (p<0.001)
Individual	80.7	80.7	68.0 ^{***}	80.0	83.3	81.3	13.42 (p=0.01)
Group	56.3	50.0	42.7	52.0	64.7 ^{**}	53.1	36.77 (p<0.001)
Faith	81.7	51.8	81.6 [*]	79.7 [*]	90.7 [*]	65.6	131.51 (p<0.001)
Family	65.3	67.9	69.4	65.3	64.5	59.4	1.83 (p=0.77)

pairwise comparisons with white ethnic group via χ^2 tests (categorical variables) or two-sided *t*-tests (continuous variables).

^a Test statistics for omnibus tests, χ^2 tests for categorical variables and ANOVAs for continuous variables.

^b Pairwise comparisons conducted using Fisher's exact test due to small cell counts.

* $p<0.001$

** $p<0.01$

*** $p<0.05$

Table 2
Logistic regression models prediction preference for medication, individual, and group treatment

Variable	Medication			Individual			Group		
	OR	95%CI	p	OR	95%CI	p	OR	95%CI	p
Ethnicity			<0.001			0.005			<0.001
US-White (ref)									
Black immigrant	0.27	0.14–0.53	<0.001	0.74	0.38–1.43	0.371	0.90	0.51–1.57	0.700
US-Black	0.30	0.20–0.45	<0.001	1.12	0.68–1.83	0.665	1.11	0.76–1.63	0.578
Immigrant Latina	0.50	0.33–0.77	0.002	1.88	1.10–3.21	0.020	2.33	1.55–3.52	<0.001
US-Latina	0.52	0.22–1.23	0.135	1.22	0.44–3.40	0.707	1.16	0.53–2.57	0.714
Education			0.007			0.175			0.098
College graduate (ref)									
Below high school	1.46	0.91–2.35	0.121	0.63	0.36–1.12	0.117	0.85	0.55–1.32	0.473
High school or trade school	1.04	0.66–1.66	0.863	0.78	0.45–1.33	0.355	1.04	0.69–1.59	0.834
Some college	0.82	0.50–1.34	0.429	0.95	0.54–1.66	0.856	1.25	0.81–1.92	0.316
Insurance Status			0.114			0.399			0.246
No insurance (ref)									
Public assistance	0.86	0.64–1.16	0.315	1.12	0.80–1.58	0.511	1.10	0.84–1.43	0.490
Private insurance	0.72	0.52–0.99	0.040	0.95	0.54–1.66	0.378	0.865	0.64–1.11	0.230
Marital status			0.114			0.502			0.645
Married/living with partner (ref)									
Widowed/Separated/Divorced	1.06	0.77–1.44	0.716	1.24	0.86–1.81	0.366	1.15	0.86–1.53	0.358
Never married	0.98	0.75–1.27	0.860	1.08	0.80–1.46	0.617	1.02	0.80–1.29	0.898
Not working full time	0.84	0.66–1.06	0.137	0.91	0.69–1.19	0.483	0.89	0.72–1.10	0.266
Number of children	0.99	0.92–1.08	0.837	0.92	0.84–1.01	0.083	0.97	0.90–1.05	0.439
Age	1.04	0.91–1.08	<0.001	0.99	0.97–1.00	0.117	1.01	1.00–1.02	0.172
Currently in mental health treatment	3.88	2.75–5.47	<0.001	2.29	1.39–3.76	0.001	1.14	0.82–1.58	0.451
Major depression	1.93	1.54–2.42	<0.001	2.66	2.02–3.51	<0.001	1.35	1.10–1.66	0.004
Somatization	1.29	0.97–1.58	0.048	1.19	0.92–1.54	0.174	1.12	0.91–1.37	0.278
Stigma	1.16	0.92–1.46	0.221	0.83	0.64–1.09	0.172	0.58	0.47–0.72	<0.001

Table 3
Logistic regression models predicting preference for faith or family and friends

Variable	Faith			Family and friends		
	OR	95%CI	p	OR	95%CI	p
Ethnicity			<0.001			0.700
US-White (ref)						
Black immigrant	3.62	1.84–7.10	<0.001	0.95	0.52–1.73	0.864
US-Black	3.85	2.56–5.79	<0.001	0.82	0.55–1.23	0.338
Immigrant Latina	9.76	6.06–15.72	<0.001	0.96	0.63–1.47	0.842
US-Latina	1.86	0.81–4.28	0.142	0.70	0.31–1.57	0.387
Education			0.045			0.157
College graduate (ref)						
Below high school	0.62	0.32–1.21	0.163	0.59	0.37–0.95	0.030
High school or trade school	0.49	0.26–0.94	0.031	0.61	0.39–0.97	0.035
Some college	0.71	0.37–1.38	0.312	0.68	0.42–1.09	0.106
Insurance status			0.170			0.232
No insurance (ref)						
Public assistance	0.93	0.67–1.29	0.674	1.23	0.94–1.62	0.170
Private insurance	1.34	0.93–1.94	0.116	1.21	0.91–1.60	0.194
Marital status			0.335			0.043
Married/living with partner (ref)						
Widowed/separated/divorced	0.76	0.52–1.11	0.157	0.79	0.59–1.05	0.103
Never married	0.99	0.72–1.35	0.925	1.17	0.92–1.50	0.204
Not working full time	0.80	0.60–1.07	0.134	1.04	0.84–1.30	0.715
Number of children	1.01	0.91–1.13	0.801	1.01	0.93–1.09	0.909
Age	1.04	1.02–1.07	<0.001	1.01	0.99–1.02	0.244
Currently in mental health treatment	1.21	0.79–1.86	0.381	1.25	0.88–1.77	0.205
Major depression	0.95	0.72–1.24	0.686	0.82	0.67–1.01	0.058
Somatization	1.37	1.01–1.62	0.049	0.91	0.74–1.12	0.358
Stigma	0.89	0.67–1.18	0.382	0.88	0.71–1.09	0.251