ALTERNATIVE HEALTHCARE USE IN THE UNDER-SERVED POPULATION

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Objective: To apply the Behavioral Model for Vulnerable Populations to the examination of the correlates of alternative healthcare utilization among Hispanic and African-American adults residing in public housing.

Design: Cross-sectional survey of a community-based sample.

Setting: Urban public housing communities in the county of Los Angeles.

Participants: A geographically defined random sample of 287 African-American and Latino heads of households from three urban public housing communities.

Results: The use of alternative health care was assessed with three indices reflecting how frequently respondents used alternative sources of health care: 1) to prevent sickness; 2) to treat sickness; and 3) to substitute for conventional health care. Multivariate analysis of data indicates that lower education, greater perceived racial discrimination, and poorer health status were associated with the use of alternative health care *to prevent sickness*. Furthermore, greater perceived racial discrimination, greater financial strain, and poorer health status were associated with the use of alternative health care *to treat sickness*. In addition, four variables were associated with increased frequency of alternative healthcare utilization as a substitute for conventional care, namely: 1) diminished belief that powerful individuals (such as healthcare professionals) control one's health; 2) greater perception of racial discrimination; 3) greater financial strain; and 4) reduced access to health care.

Conclusion: Enabling characteristics helped explain the use of alternative health care to treat sickness as a substitute for conventional health care, but not to prevent sickness, in this population. Perceived racial discrimination was the strongest correlate for each type of alternative healthcare use, while health status was also a strong predictor. The use of alternative health care for prevention and for substitution should be examined separately in disadvantaged minority populations. (*Ethn Dis*. 2005;15:531–539)

Key Words: Alternative Health Care, Minority, Prevention, Public Housing, Racial Discrimination

INTRODUCTION

The extent of use of alternative health care among under-served minorities is unknown. In addition, little is known as to whether self-care and alternative health care function as substitutes for or complements to modern medicine among this population. Similarly, we do not know whether the use of alternative health care interferes with or deprives the receipt of appropriate professional care. Equally important, professional healthcare providers are unaware of alternative medicine use among their patients.[1–4]

Examination of multifaceted correlates of alternative healthcare behaviors of under-served minority populations is a scientific challenge for health services researchers. Illness and healing are not discrete phenomena that can be isolated and considered outside their social, economic, cultural, and political contexts. When people develop or want to prevent a health-related problem or illness, they secure relief by means of various options, all of which are largely informed by their social, cultural, or economic contexts.[5] Many under-served minorities that reside in inner cities struggle with the distinctive features of their socioeconomic environment which can make obtaining even basic, but necessary, Western allopathic or conventional health care a challenge.

While many under-served minorities have long recognized self-care as a means of addressing this challenge, others have simply practiced self-care in the context of their cultural heritage. Self-care and the use of alternative medicine remain important but largely unknown components of health-seeking behaviors among under-served minority populations. Review of the existing research shows that, until very recently, use of alternative health care among minority populations has been effectively excluded from alternative healthcare research. As a result, a profile of the alternative healthcare consumer as White, female, affluent, middle-aged, and well-educated has emerged.[6]

Correlates of Use of Alternative Health Care Among Under-Served Populations

Community and clinic-based research reveal converging evidence that points to various factors leading to the use of alternative health care among disadvantaged minority populations.[2,6–10]

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Review of the existing research shows that, until very recently, use of alternative health care among minority populations has been effectively excluded from alternative healthcare research.

While some studies document that a higher level of education among middle-class populations is associated with an increased use of alternative health care,[11] other studies report that lower levels of education among underserved communities also lead to higher use of certain forms of alternative health care.[6] One recent national probability sample, containing an over-sampling of ethnic minorities, reports that the use of complementary and alternative medicine is equally prevalent among White, African-American, Latino, Asian, and Native American populations in the United States, but the characteristics of consumers vary considerably by the specific alternative healthcare modality.[12]

Using a culturally sensitive survey instrument and protocols among a sample of low-income urban African Americans, Barnett and colleagues[6] document that certain forms of alternative health care (folk or family practices) are commonly used by African-American populations, and factors that affect complementary and alternative medicine use include age, lack of access to conventional health care, cultural heritage, and dissatisfaction with conventional health care. However, another recent survey among 405 Hispanic patients attending a public hospital outpatient clinic documents that many Hispanic patients who receive their health care through a public hospital system use the services of *curanderos*[7] (healers), who adhere to centuries-old practices and indigenous Mexican cultural beliefs. This study found an association between higher levels of income and education and use of *curandero* services.

Objective of Study

The purpose of this study is to examine the prevalence of alternative health care as a treatment or a substitute for conventional health care among a random sample of African-American and Latino heads of household in urban public housing communities within Los Angeles. This study applies a well-known, recently revised theoretical model of healthcare access and use, known as the Behavioral Model for Vulnerable Populations, to examine the correlates of alternative healthcare use in this population.[13,14] This model conceptualizes healthcare use as the end product of a complex pattern of interactions among predisposing, enabling, and need-for-care characteristics.[13,14] Public housing communities represent an important and highly efficient source of community-level information concerning socioeconomically disadvantaged households in the United States. These public housing units provide shelter to low-income families that may otherwise be homeless or forced to live in substandard housing units. Three million residents occupy the 1.2 million subsidized public housing units in the United States; of these units, 47% include at least one child.[15]

METHODS

Sample

Data for this study were derived from the Services Access in Urban Public Housing study, a cross-sectional community survey with the objective of identifying barriers to healthcare access for residents of federally mandated and municipally administrated urban public housing developments in southern, southwestern, and eastern sections of Los Angeles County. Details of the study design have been described previously.[16–18] In brief, from the sampling frame of 1,394 households in the three public housing communities, a random sample of 418 (30%) households were identified as potential participants. Of these households, 27 (6.5%) were ineligible because the occupants did not speak either English or Spanish, or the residence was unoccupied. Of the remaining 391 eligible households, 287 (73.4%) completed the interview.

The mean age of the heads of household for our sample (N=287) was 45 years (SD=16.5); the range was 18 to 88 years of age. Similar to national estimates of almost 80% of female-headed households in public housing, in this sample 89% of households had a female head. Sixty percent of the heads of household reported having no high school diploma. Seventy-six percent of our sample reported being unemployed, and >87% reported at least one chronic medical condition. Further, 42% of this sample reported that they were suffering from depression.

Measures

Predisposing Characteristics

Eleven predisposing characteristics were examined – age, gender, ethnicity, employment status, education, family size, ability to speak English (five ordinal categories), perceived racial discrimination, and three subscales of health locus of control (see Table 1). A dummy code of zero was assigned to male, Latino, and unemployed, whereas one was assigned to their female, African-American, and employed (full- or part-time) counterparts.

Perceived Racial Discrimination scale measured routine and relatively minor experiences of unfair treatment.[19,20] Respondents indicated how often they experienced each of six examples of discriminatory treatment, with response options ranging from one

Table 1. Predisposing, enabling, and need-for-care characteristic (*N*=287)

Predisposing	*N* (%) [Mean ± SD, Range]	Enabling	*N* (%) [Mean ± SD, Range]
Age (years)	[45 ± 16.5; 18–88]	Financial strain	[3.9 ± 0.8; 1–5]
Gender		Access to medical care	[4.2 ± 0.9; 1–5]
Male	33 (12)	Affordability of medical care	[45 ± 16.5; 18–88]
Female	254 (88)	Availability of health information	[4.6 ± 1.6; 2–10]
Ethnicity		Use of public services	[5.5 ± 3.2; 0–15]
African American	144 (50)	Continuity of care	[1.4 ± 0.7; 0–2]
Hispanic	114 (40)	**Need-for-Care**	***N* (%) [Mean ± SD, Range]**
Others	29 (10)		
Employment status		Health status index	[45 ± 16.5; 18–88]
Full/part time	68 (24)	Self-reported depression	138 (42)
Not working	219 (76)	Physician visits	[6.0 ± 5.2; 0–15]
Education (years)	[9.6 ± 4.0; 0–16]		
Family size (# persons)	[3 ± 1.7; 1–8]		
Ability to speak English	[2 ± 2.1; 0–5]		
Perceived racial discrimination	[39 ± 8.6, 8–48]		
Health locus of control			
1. Internal	[24.8 ± 5.6, 6–36]		
2. Chance	[20.1 ± 5.9, 6–36]		
3. Powerful others	[23.0 ± 6.0, 6–36]		

to six, and a summated total score. Williams and colleagues[19] have reported high internal consistency (α=.88) for this scale; similarly, in our sample, the Cronbach α was .87.

Multidimensional Health Locus of Control (MHLC) scales assessed the health locus of control beliefs.[21] The MHLC scale consists of three subscales: 1) Internal HLC (IHLC), measuring the extent to which one believes that internal factors are responsible for health/illness; 2) Powerful Others HLC (PHLC), measuring the belief that one's health is determined by powerful others; and 3) Chance HLC (CHLC), measuring the extent to which one believes that health/illness is a matter of fate, luck, or chance. Response options range from 1 to 6, with a summated score ranging from 0 to 36. Previous studies have shown these scales to be moderately reliable, and in this sample, the Cronbach αs for IHLC, PHLC, and CHLC were .60, .65, and .61, respectively.

Enabling Characteristics

Six enabling characteristics were measured (Table 1): financial strain, access to medical care, affordability of medical care, availability of health-related information, use of public services, and continuity of care.

Financial strain was measured using six items on a Likert scale, which included the following questions: in the past 12 months, how frequently were you unable to: 1) buy the kind of food you feel your family should have; 2) buy the amount of food you feel your family should have; 3) buy the clothes you feel your family should have; 4) pay your rent/mortgage; 5) pay your monthly bills; and 6) make ends meet. The options ranged from 1=always to 5=never. The average of this summed score represents the financial strain of the household, with a higher score indicating fewer financial problems. The internal consistency of this multi-item scale was examined by using Cronbach coefficient α and was found to be .83.

Access to medical care was measured by using a five-item Likert scale (1= extremely difficult to 5=not difficult at all), which included the following questions: 1) overall, how difficult is it for you to get medical care; 2) how difficult is it for you to see a doctor when you would like medical care; 3) how difficult is it for you to visit a doctor when you need medical care; 4) how difficult is it for you to visit doctors during the hours they are in their offices; and 5) how difficult would it be for you to get a routine physical exam if you wanted one. The mean of the sums of the score of recorded items were calculated from 1 to 5, with higher values indicating increased access to medical care. Cronbach α for this scale in this sample was .84.

Affordability of medical care was measured by three items indicating: 1) whether the participants have medical insurance; 2) how frequently in the past 12 months participants were unable to visit a doctor because payment was necessary; and 3) whether participants had ever been turned down for medical care because they could not pay. Availability of health-related information was measured by summing the following two items: 1) overall, how difficult is it for you to get health information; and 2) overall, how satisfied are you with your sources of health information. Response options ranged from 1 to 5.

Use of public services was measured by asking respondents to identify the

specific social and community services from a list of 17 including nutrition services, legal aids, transportation services, parenting classes, counseling services, housing assistance, etc that they had used within the 12-month period prior to the interview. Finally, continuity of care was assessed with two items asking: 1) whether participants usually utilized a regular source for medical care; and 2) whether they usually received medical care by the same doctor.

Need-for-Care Characteristics

Three need-for-care characteristics were measured (Tables 1 and 3). First, the health status index included seven variables: 1) number of chronic conditions that were diagnosed by a doctor (self-reported); 2) limitation in daily activities (using a Likert scale 1=extremely limited to 5=not limited at all); 3) perceived self-rated health status (excellent to poor); 4) disability status (disabled person=1 and non-disabled=6); 5) frequency of sickness within past 12 months (never=1 to always=5); 6) and 7) self-report of health condition compared to "two years ago" and compared with people in "same age" (each with categories ranging from better to worse). Second, self-reported depression involved asking participants to report whether they have depression. Third, physician visits (office-based) were assessed by asking the participants about their frequency of doctor visits in the past 12 months.

Outcome Variables

The use of alternative health care was assessed with three indices reflecting how frequently respondents used alternative sources of health care in the past 12 months for the following purposes: 1) to prevent sickness; 2) to treat sickness; and 3) to substitute for conventional health care in the past 12 months. For each index, the possible types of alternative medicine included: 1) traditional remedies; 2) herbal remedies; 3) home remedies; 4) vitamin therapy; 5) prayer; 6) consulting a psychic; 7) consulting a Christian faith healer; 8) consulting a priest/pastor; 9) consulting an herbalist; 10) consulting a spiritual healer (curandero, voodoo, mystic); and 11) use of over-the-counter medicine. Response categories ranged from 1=always to 5=never. For each domain, the Cronbach coefficient α was $>.64$.

RESULTS

Use of Alternative Health Care

The frequency of use of alternative health care in our sample is shown in Table 2. Regardless of the purpose, prayer is the form of alternative health care most often used, followed by traditional remedies, over-the-counter medication, home remedies, and herbal remedies. Alternative health care is most often used to treat sickness and least often used as a substitute for conventional health care. Table 2 reveals that 2% of our sample consulted a spiritual healer (curanderos, voodoo, mystic, etc). Approximately 10% and 5% consulted with a priest/pastor and or a psychic, respectively, and 5% of participants reported consulting a herbalist. More than 50% of the sample reported consuming over-the-counter medications; yet, three out of four reported that they had never used vitamin therapy for prevention, treatment, or sickness.

Bivariate Analysis

At the bivariate level, 8 out of the 20 independent variables examined showed a statistically significant relationship with the use of alternative health care to prevent sickness at $P<.05$ (results not shown). These were: 1) gender; 2) ethnicity; 3) education; 4) perceived racial discrimination; 5) financial strain; 6) use of public services; 7) health status; and 8) self-reported depression.

Second, eight variables showed a significant relationship with the use of alternative health care to treat sickness, at $P<.05$ (results not shown). These variables were: 1) gender; 2) perceived racial discrimination; 3) chance health locus of control; 4) financial strain; 5) access to health care; 6) use of public services; 7) health status; and 8) self-reported depression. Finally, 6 out of 20 independent variables showed a significant relationship with the use of alternative health care to substitute conventional health, at $P<.05$ (results not shown). These variables were: 1) perceived racial discrimination; 2) powerful others health locus of control; 3) financial strain; 4) access to health care; 5) health status; and 6) office-based physician visits.

Multivariate Analysis

Multiple regression analysis was used to estimate the effects of predisposing, enabling, and need-for-care characteristics on the use of alternative health care to prevent sickness, to treat sickness, and to substitute conventional health care. All variables significant at the .05 level in bivariate correlation analyses were entered into stepwise backward analyses, and findings were confirmed with stepwise forward analyses. To verify the absence of multicollinearity, the correlations among the predictors were also examined. The inter-relationships among independent variables were modest with no indication of possible multicollinearity.

Table 3 reports the regression estimates of the effects of the independent variables on the use of alternative health care to prevent sickness. As seen in model 1, when the predisposing variables were entered into the model, the use of alternative healthcare for prevention was only related to gender and racial discrimination, males used less and those who perceived more racial discrimination used more. Introduction of enabling characteristics in model 2 made no change to the equation.

Table 2. Frequency of alternative healthcare use by type ($N=287$)

	To Prevent Sickness					To Treat Sickness					To Substitute for Conventional Health Care				
	Always (%)	Most of the Time (%)	Sometimes (%)	Rarely (%)	Never (%)	Always (%)	Most of the Time (%)	Sometimes (%)	Rarely (%)	Never (%)	Always (%)	Most of the Time (%)	Sometimes (%)	Rarely (%)	Never (%)
Traditional remedies	10	11	24	11	44	12	15	23	12	38	8	14	19	12	47
Herbal remedies	5	5	17	7	67	6	5	13	11	65	2	6	12	8	71
Home remedies	7	7	24	13	49	7	9	25	14	45	3	10	21	14	52
Vitamin remedies	7	5	9	4	75	8	6	7	4	76	5	2	7	4	82
Over-the-counter medicine	6	10	22	13	49	9	10	23	13	45	5	12	20	11	51
Prayer	47	14	8	7	25	51	7	12	5	25	28	10	14	10	39
Consulting a psychic	1	1	1	2	95	1	1	1	2	95	1	2	1	1	95
Consulting a priest/pastor	3	3	3	5	85	2	1	6	5	86	1	1	5	3	90
Consulting a faith healer	1	1	2	1	95	1	1	3	1	94	1	1	2	1	95
Consulting an herbalist	1	1	3	1	94	1	1	3	1	94	1	1	2	1	95
Consulting a spiritual healer	0	0	1	1	98	0	0	1	1	98	0	1	1	0	98

However, the inclusion of need-for-care characteristics in model 3 indicated that when predisposing and enabling characteristics are held constant, perceived health status index significantly correlated with the use of alternative health care for prevention. In the final model, the use of alternative health care for prevention was associated with higher education, greater perceived racial discrimination, and poorer health status (Table 3).

Furthermore, Table 4 reports the regression estimates of the effects of the independent variables on the use of alternative health care to treat sickness. Greater perception of racial discrimination, greater financial strain, and poorer health status were associated with the use of alternative health care to treat sickness. Finally, Table 5 reports that four variables were associated with increased frequency of alternative health care use as a substitute for conventional care. These variables were: 1) reduced belief that powerful individuals (such as physicians or other health professionals) control one's health; 2) greater perceived racial discrimination; 3) greater financial strain; and 4) reduced access to medical care.

DISCUSSION

This study applied a well-known, recently revised theoretical model of healthcare access and use, known as the Behavioral Model for Vulnerable Populations, to examine the correlates of use of alternative health care among Hispanics and African Americans residing in public housing in Los Angeles County, California. Our results suggest that financial strain and access to medical services were important factors that explained the use of alternative health care to treat sickness and as a substitute for conventional health care but not to prevent sickness. In addition, perceived racial discrimination and health status play a major role in the consumption of

Table 3. Stepwise multiple regression estimates (reduced model) of effects of predisposing, enabling, and need-for-care characteristics on use of alternative health care to prevent sickness (*N*=287)

	Model 1		Model 2		Model 3	
Independent Variables	**β**	**S.E**	**β**	**S.E**	**β**	**S.E**
Predisposing						
Age	—	—	—	—	—	—
Gender (female)	−.129	.092	−.129	.092	NS	NS
Ethnicity (AA)	NS	NS	NS	NS	NS	NS
Employment status	—	—	—	—	—	—
Education (years)	NS	NS	NS	NS	−.129	.007
Family size	—	—	—	—	—	—
Ability to speak English	—	—	—	—	—	—
Racial discrimination	.305	.003	.305	.003	.284	.003
Internal HLC	—	—	—	—	—	—
Chance HLC	—	—	—	—	—	—
Powerful others HLC	—	—	—	—	—	—
Enabling						
Financial strain			NS	NS	NS	NS
Access to care			—	—	—	—
Affordability of care			—	—	—	—
Availability of information			—	—	—	—
Use of public services			NS	NS	NS	NS
Continuity of care			—	—	—	—
Need-for-care						
Health status index					−.208	.029
Self-reported depression (yes)					NS	NS
Physician visits (number)					—	—
F Statistic	27.42		27.42		14.24	
Adjusted R^2	0.114		0.114		0.145	

Notes: S.E refers to Standard Error; β refers to Standardized Regression Coefficient; — indicates that variable was not used in the reduced model; NS refers to Non-Significant (NS) coefficients.

All reported coefficients are statistically significant at $P<.05$.

alternative health care as prevention, treatment, and substitution variables were held constant.

Enabling characteristics were responsible for 32% [(0.135−0.092)/0.135 * 100=32%] and 24% [(0.076−0.053)/0.096 * 100=24%] of the explained variance in the use of alternative medicine as a substitute for formal medical care and during sickness, respectively. However, enabling characteristics made no contribution to explaining the variance in the use of alternative medicine for prevention [0.114−0.114)/0.135 * 100=0.00%]. The association between enabling characteristics and the use of alternative medicine as treatment and substitution are especially relevant findings, given that minority populations are substantially more likely than their Caucasian counterparts to be uninsured, suffer from poverty, and report not having a usual source of care.

Our results suggested that financial strain and access to medical services were important factors that explained the use of alternative health care to treat sickness and as a substitute for conventional health care but not to prevent sickness.

To the best of our knowledge, this is the first study that examines the use of alternative medicine among underserved minority populations for two different purposes: for prevention and as a substitute for treatment. The results of our study justify the separation of the use of alternative medicine into these two domains among disadvantaged minority populations. Our study also challenges previous research that generated a profile of the alternative medicine consumer as White, affluent, and well-educated.[6] This study suggests that financial strain among disadvantaged minority populations may motivate them to use alternative care as a substitute for conventional care.

Among the Multidimensional Health Locus of Control Scales (MHLC), only powerful others was associated with the use of alternative health care, suggesting that those who perceive doctors, nurses, and other health providers as having a strong influence over their

Table 4. Stepwise multiple regression estimates (reduced model) of effects of predisposing, enabling, and need-for-care characteristics on the use of alternative health care to treat sickness (*N*=287)

	Model 1		Model 2		Model 3	
Independent Variables/Sub Scales	**β**	**S.E**	**β**	**S.E**	**β**	**S.E**
Predisposing						
Age	—	—	—	—	—	—
Gender (female)	NS	NS	NS	NS	NS	NS
Ethnicity (AA)	—	—	—	—	—	—
Employment status	—	—	—	—	—	—
Education (years)	—	—	—	—	—	—
Family size	—	—	—	—	—	—
Ability to speak English	—	—	—	—	—	—
Racial discrimination	.230	.003	.188	.003	.188	.003
Internal HLC	—	—	—	—	—	—
Chance HLC	NS	NS	NS	NS	NS	NS
Powerful others HLC	—	—	—	—	—	—
Enabling						
Financial strain			.156	.035	.132	.035
Access to care			NS	NS	NS	NS
Affordability of care			—	—	—	—
Availability of information			NS	—	NS	—
Use of public services			NS	NS	NS	NS
Continuity of care			—	—	—	—
Need-for-care						
Health status					−.146	.028
Self-reported depression (yes)					NS	NS
Physician visits (number)					—	—
F Statistic	28.09		15.79		240.6	
Adjusted R^2	0.053		0.076		0.096	

Notes: S.E refers to Standard Error; β refers to Standardized Regression Coefficient; — indicates that variable was not used in the reduced model; NS refers to Non-Significant (NS) coefficients.

All reported coefficients are statistically significant at $P<.05$.

health were less likely to use alternative health care instead of conventional health care. This may be due to issues of distrust of the formal medical system. Some evidence now documents racial differences in lack of trust in physicians by minority populations, particularly African Americans.[22]

In fact, the perceived racial discrimination index proved to be one of the strongest independent predictors of the three types of alternative healthcare use, with a positive association even after all other variables were held constant. Other studies have documented that racism and discrimination are a part of daily life for many under-served minority individuals, which can generate stress, lead to emotional distress, and adversely affect health.[23–25] Our findings suggest that one of the mechanisms through which perceived racial discrimination leads to poorer health may be related to decreased use of conventional health care.

This study is one of the first attempts to better understand the correlates of self-reported use of alternative health care among under-served Hispanics and African Americans. The main shortcoming of this study is the cross-sectional design. In addition, the number of participants admitting to a psychic consultation may be underreported due to the stigma associated with this practice. However, this study provides an entry point for further examination of frequency and correlates of specific alternative healthcare modalities and may assist in identifying those under-served minority adults who are at-risk for using alternative health care as a substitute for conventional health care. Therefore, the results of our study justify the need for future research that examines two issues separately: 1) alternative health care as a substitute for conventional care; and 2) the use of alternative health care for prevention particularly among disadvantaged minority populations.

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Table 5. Stepwise multiple regression estimates (reduced model) of effects of predisposing, enabling, and need-for-care characteristics on the use of alternative health care as substitute for conventional health care (*N*=287)

	Model 1		Model 2		Model 3	
Independent Variables/Sub Scales	**β**	**S.E**	**β**	**S.E**	**β**	**S.E**
Predisposing						
Age	—	—	—	—	—	—
Gender (female)	—	—	—	—	—	—
Ethnicity (AA)	—	—	—	—	—	—
Employment status	—	—	—	—	—	—
Education (years)	—	—	—	—	—	—
Family size	—	—	—	—	—	—
Ability to speak English	—	—	—	—	—	—
Racial discrimination	.265	.003	.210	.003	.210	.003
Internal HLC	—	—	—	—	—	—
Chance HLC	—	—	—	—	—	—
Powerful others HLC	.126	.005	.115	.004	.115	.004
Enabling						
Financial strain			.138	.035	.138	.035
Access to care			.127	.028	.127	.028
Affordability of care			—	—	—	—
Availability of information			—	—	—	—
Use of public services			—	—	—	—
Continuity of care			—	—	—	—
Need-for-care						
Health status index					NS	NS
Self-reported depression (yes)					—	—
Physician visits (number)					NS	NS
F Statistic	23.26		10.91		10.93	
Adjusted R^2	0.092		0.135		0.135	

Notes: S.E refers to Standard Error; β refers to Standardized Regression Coefficient; — indicates that variable was not used in the reduced model; NS refers to Non-Significant (NS) coefficients.

All reported coefficients are statistically significant at $P<.05$.

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