The small sample size of the present study limits its generalizability. However, quite similar results were also observed in the earlier pilot study, increasing confidence that the observed effects are real and replicable. This study did not attempt to control for the possible effects of attention alone on behavior, but it seems doubtful to us that attention alone would lead to the 12-month reduction in health care utilization achieved. Other studies have shown that simply paying more attention to patients (or giving attention plus a certain amount of education) has not produced the type of persistent behavior change and medical improvement observed here (e.g., Kaplan, *et al*;[6] Lewis, *et al*[7]).

Using $125 as the estimated cost of an emergency treatment for asthma, the average of 7.4 visits by the control group amounted to a cost of about $925 per child for the 12-month posttreatment period. The 1.9 emergency visits per child in the experimental group (plus an estimated $180 per child for program administration) amounted to a total cost of about $418 per child, an immediate cost savings of about $507 per child, per year with the potential for further savings in subsequent years.

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Correlates of Depressive Symptoms among a Select Population of Black Men

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Abstract: This study was undertaken to provide information on the impact of demographic factors, stressful life events, and sociocultural patterns on depressive symptomatology among 142 noninstitutionalized Black men. The findings indicate that age, family income, household size, employment status, and conflict between the sexes were related to the presence of depressive symptoms. When controls were introduced, only family income and conflict between the sexes were correlates of depressive symptoms among Black men in this study. (*Am J Public Health* 1985; 75:1220–1222.)

Introduction

Since depression is a major health problem for a large number of adults,[1,2] considerable research attention has been focused on identifying predictors of depressive symptoms.[3–10] However, the literature regarding the existence and rate of depressive illness among Black people is sparse. Several studies have found that race had no effect upon the rate of depressive symptoms when socioeconomic status, age, marital status, and sex were controlled.[6,10] Contrary to the general finding that women have higher rates of depression, three studies have found that Black men had higher depression scores than Black women when adjustments were made for socioeconomic status-related variables.[11–13]

Because Black men have more negative life experiences than other groups (e.g., higher rates of unemployment and underemployment, higher death rates, higher incidence of drug addiction, more police harassment, and a poor quality of education), one would expect Black men to report a high level of depressive symptoms.[13] Most research has focused on understanding how sociodemographic factors predict depressive symptoms, however. Investigators have tended to ignore the problem of depression *within* the context of the Black community. There is a need to move away from the practice of only comparing Blacks and Whites on one or two dimensions.[14,15]

Many of the epidemiological studies of the incidence and prevalence of depressive illness have not included very diverse samples of Black men. Thus, we were unable to determine what variables best explain depressive symptomatology within the Black male population. This pilot study explores how demographic factors, stressful life events, and sociocultural variables are correlated with depressive symptoms among a group of Black male adults.

Methods

Data were collected from noninstitutionalized Black male subjects who lived in a large northeastern city in the United States. The following sample procedures were used: a list of computer-generated random telephone numbers (24 per cent of the respondents); posted announcements in barbershops that had a largely adult Black male clientele (13 per cent of the respondents); referral by community groups and other respondents (63 per cent of the respondents). The major concern was to obtain a heterogeneous sample of Black males that would potentially reflect a variety of life-styles. Out of a pool of 150 potential respondents contacted, 142 agreed to participate.

Personal interviews of approximately two (2) hours were conducted by trained interviewers at Howard University. The interview schedule consisted of open-ended and forced-choice type questions on a wide range of topics. The dependent variable, depressive symptoms, was measured by

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the Center for Epidemiological Studies-Depression (CES-D) index which consists of 20 symptoms of depression experienced during the prior seven days.[11,12,16] With a score range from 0 to 60, a high score indicates a high level of depressive symptoms and a low score means few or no symptoms of depression. The Alpha coefficient for the CES-D scale with this sample was .82.

Age, marital status, education, family income, and household size were the demographic variables examined. Stressful life events variables were based on the following measures: employment status (employed or unemployed); residential mobility (number of moves in the past five years); conflict between the sexes (number of disagreements with mates during the past two weeks); frequency of illnesses in the past year; and number of arrests in the past year. The sociocultural variables included the following measures: family type (nuclear or extended); number of friends; racial consciousness (the extent to which a person has positive views of Black people and their institutions and his/her awareness of racial oppression); religiosity (the extent to which a person participates at a personal, group, or organizational level in religious activities; and community participation (number of meetings attended in the past two weeks).

The analytic strategy involved examining the relationship between mean scores on the CES-D scale and the three sets of independent variables via analysis of variance and multiple regressions.

Results

Respondents had a mean depression score of 12.15 (SD = 8.44). Seventeen men did not complete all of the CES-D items. To account for the missing data, the mean for each completed item was substituted for the missing scores. The revised mean depressive symptoms score for this sample was 12.11 (SD = 8.30). Researchers have generally used a cut-off score of 16 and above as an indicator of a serious level of depression.[11,12] Based upon this criterion, less than one-third of the men scored within this range. The possible range on the CES-D index was 0 to 60, but the effective score range was 0 to 37.

As shown in Table 1, among the demographic variables, the men scoring highest on the CES-D scale were under 30 years of age, earning less than $8,000 a year, and living in households with five or more persons. Among the life events variables, the respondents who were unemployed and who had high or medium levels of conflict with their mates had the highest levels of depressive symptoms. There was no important relationship between the sociocultural variables and depression symptoms, but the men in extended family units and with high degrees of racial consciousness tended to score higher on the CES-D scale than did their counterparts.

Multiple regression was used to examine the independent effects of various demographic, stressful life events and sociocultural variables on depression scores. Among the demographic variables, income and household size explained the highest proportion of the variance (13 per cent) in depression symptoms. As a whole, the demographic variables accounted for 15.5 per cent of the explained variance ($F(4,120) = 4.40$, $p < .01$).* Conflict between the sexes and employment status were the best correlates of depressive symptoms among the life events variables. Together these variables accounted for 12.6 per cent of the explained variance. The total explained variance for the life events variables was 13.3 per cent ($F(5,78) = 2.39$, $p < .05$).* Sociocultural variables accounted for only 3.9 per cent of the variance in the dependent measure.* As a final analysis, the measures from each group of independent variables and the CES-D index were included in a regression model. As shown in Table 2, when all four variables were counted, 21 per cent

TABLE 1—Depressive Symptoms by Independent Variables

Variable	N (%)	M	SD
Age*			
Less than 30	57 (40)	13.73	8.11
30–44	55 (39)	12.00	9.09
45 or more	30 (21)	9.23	6.34
Marital Status			
Married	58 (42)	11.63	8.07
Formerly married	18 (13)	9.75	9.22
Never married	63 (45)	12.83	8.10
Educational Status			
Less than high school	33 (23)	12.57	7.86
High school	36 (25)	13.82	9.45
Some college	28 (20)	11.21	8.10
College graduate	45 (32)	10.95	7.75
Family Income**			
Less than $8,000	29 (23)	15.49	10.55
$8,000–$12,499	30 (23)	14.23	8.22
$12,500–$19,999	39 (30)	9.79	5.97
$20,000 or more	31 (24)	8.92	6.47
Household Size*			
1	31 (22)	10.65	8.00
2	29 (21)	12.22	7.09
3–4	47 (34)	10.64	9.10
5 or more	32 (23)	15.89	7.80
Employment Status**			
Employed	91 (66)	10.78	7.85
Unemployed	47 (34)	14.40	8.82
Mobility			
No moves	65 (48)	11.86	7.60
1–2 moves	38 (28)	10.72	8.24
3 moves	19 (14)	12.40	9.15
4 or more moves	13 (10)	15.85	7.90
Conflict between Sexes**			
Low	36 (41)	7.50	5.28
Medium	28 (32)	15.21	9.49
High	24 (27)	12.54	7.23
Number of Arrests			
None	69 (50)	11.21	8.09
1–4	53 (39)	12.28	8.27
5 or more	15 (11)	15.62	8.94
Number of Illnesses			
None	72 (51)	11.32	8.29
1	49 (35)	12.78	8.26
2 or more	19 (14)	13.07	8.47
Family type			
Nuclear	119 (86)	11.65	8.09
Extended	19 (14)	14.65	9.18
Number of Friends			
Less than 2	19 (17)	13.72	6.28
2–3	40 (36)	11.54	8.32
4–5	35 (31)	12.34	8.85
6 or more	18 (16)	10.56	8.91
Racial Consciousness			
Low	37 (27)	11.20	8.86
Medium	63 (46)	11.74	7.10
High	36 (27)	14.25	9.85
Religiosity			
Low	43 (32)	12.78	7.71
Medium	70 (53)	12.08	9.06
High	20 (15)	11.30	8.30
Community Participation			
No meetings	98 (69)	12.58	8.69
1 meeting	18 (13)	10.67	6.12
2 or more meetings	25 (18)	11.11	8.32

*Significant at $p < .05$.
**Significant at $p < .01$.
***Significant at $p < .001$.

*Tables regarding these data are available on request to the author.

TABLE 2—Multiple Regression of Depressive Symptoms and Selected Variables

Variables	Multiple R	R^2 Change	Simple R	Beta
Family Income	.323	.104	.323	−.314**
Conflict between Sexes	.444	.093	.296	.280**
Household Size	.456	.011	.171	.096
Employment Status	.458	.005	.206	−.044
Total R^2		.210		

**p < .01.
F(4,78) = 5.17, p < .01.

of the variance was explained with a F-ratio of 5.17 ($p < .01$). Of the four variables, family income (10.4 per cent) and conflict between the sexes (9.3 per cent) explained the largest proportion of the variance.

Discussion

At face value, these results are somewhat consistent with most of those reported in the literature. On the other hand, this analysis did not indicate a curvilinear relationship between age and depression,[10] nor did it find that the least depressed group of Black men were those who were separated or divorced.[8,11,12]

The finding that conflict between sexes was related to depression scores further underscores the concern of many community leaders, laypersons, and professionals regarding male-female interaction and family stability within the context of the Black community;[8,9] it alone accounted for 9.3 per cent of the variance in the dependent variable. Our findings suggest that health planners and practitioners need to give more consideration to developing programs designed to deal with methods for increasing family income and improving interpersonal relationships between the sexes within the context of the Black community as prevention strategies.

As an exploratory study, caution must be sounded in generalizing these findings to the Black male population as a whole. Another study is indicated with a larger and more representative sample and a more thorough exploration of stress. What has been shown is that, although demographic variables are useful in epidemiological research, it is necessary to look beyond them for the causes of depressive symptoms.

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