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### Depressive Distress Among Homosexually Active African American Men and Women

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#### Abstract

**Objective**—Although early surveys of psychological adjustment among gay men and lesbians suggest only minor and not clinically relevant differences from heterosexual populations, concerns about psychiatric morbidity associated with HIV infection have renewed interest in the prevalence of psychological distress in this population, particularly among gay men. These later studies have focused primarily on white men. However, research indicates higher crude prevalence rates of psychological distress in community-drawn samples of African American subjects than in white subjects and also higher rates in women than in men. The authors examined rates of depressive distress and suicidal thoughts among homosexually active African American men and women who might be especially at risk for psychiatric morbidity due to multiple stigmatized social statuses.

**Method**—Two nationally recruited groups of homosexually active African Americans (829 men and 603 women) completed self-administered questionnaires, including the Center for Epidemiologic Studies Depression Scale.

**Results**—Homosexually active black women were as distressed as HIV-infected gay black men. Men with symptomatic HIV disease were significantly more distressed than men who were HIV infected but asymptomatic, HIV-antibody negative, or whose HIV status was unknown. Both men and women reported distress levels in excess of those previously reported in studies of blacks or primarily white gay men.

**Conclusions**—Further research is needed to identify specific predictors of life stressors and lack of social support among homosexually active African Americans who appear to be at higher risk for depressive distress.

Surveys examining rates of psychiatric disorders among gay and lesbian populations are few (1), and the majority were conducted prior to the onset of the AIDS epidemic. These early studies (2–8), which focused predominately on the question of whether homosexuality per se was indicative of psychopathology, suggested only minor differences, if any, between the psychological status of homosexual and heterosexual populations. Although homosexuals were found to be as likely as heterosexuals to show normal psychological adjustment, some differences were found. Inconsistent findings of slightly higher lifetime prevalence rates of psychiatric help-seeking, alcohol and drug use, depressive distress, and suicide attempts in homosexual than in heterosexual samples (2, 4–7) have been attributed to the possible effect of chronic stress from negative societal attitudes toward homosexuality (9, 10). This conceptualization is consistent with psychosocial models of stress-induced distress (11).

Since the onset of the AIDS epidemic and concerns that there may be psychiatric consequences of coping with this life-threatening chronic illness, a number of studies (12–

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15) have explored the possible psychiatric morbidity associated with HIV infection among gay and bisexual men. Several of these studies (16–20) used the Center for Epidemiologic Studies Depression Scale (CES-D Scale) (21), a brief screening instrument for depressive symptoms in nonpsychiatric populations. Results showed that depressive distress scores in homosexually active men seemed to be higher than U.S. population norms for males (22) (table 1), even among men who were not HIV infected. This suggests that gay men experience somewhat elevated levels of depressive distress, though still averaging below the standard CES-D Scale cutoff score (>15) used to identify individuals at higher risk for clinical depression. Whether this heightened distress is a result of HIV-associated stress or reflects the somewhat higher distress levels found in pre-AIDS studies is indeterminable. However, symptomatic HIV-infected men reported greater distress than asymptomatic or uninfected men (20), although these conclusions are not undisputed (16, 17, 28).

Although studies of gay, lesbian, or bisexual African Americans are extremely rare (3, 29), there is good reason to expect that homosexually active blacks might experience higher levels of depressive distress than homosexually active whites. In one study examining ethnic differences in CES-D Scale scores among gay and bisexual men (20), being African American was a significant predictor of higher scores on one of the four CES-D Scale subscales, even though these men represented only 2% of the sample and were recruited from primarily white gay social networks. More importantly, several large community surveys, unselected for sexual orientation, indicate higher crude prevalence rates of depressive distress among African Americans in general than among whites (22-27, 30).

Using a cutoff score of >15 on the CES-D Scale, researchers have estimated an average depression prevalence rate of 25.9% in blacks, compared with only 16.5% in whites (23, 25, 27, 30, 31). Across these studies, African Americans consistently showed higher levels of depressive distress than white Americans (table 1). Although some research (32) would predict that black women might evidence higher levels of distress than black men, other studies have reported conflicting results (33).

Researchers using psychiatric diagnostic criteria rather than measures of depressive distress have not found consistent differences between noninstitutionalized black and white adults in current prevalence or lifetime incidence of diagnosable depressive disorders (34). Thus, although blacks report higher levels of distress than whites, this does not translate into higher rates of psychiatric depressive disorders, a pattern similar to research findings comparing homosexual and heterosexual populations.

The present study sought to document levels of depressive distress as measured by the CES-D Scale and the prevalence of suicidal thoughts in two large, nationally recruited study groups of homosexually active African Americans—a group of men and a group of women. Our purpose is to provide information about these two rarely studied populations, both of which might be especially vulnerable to depressive distress given earlier research findings. We predicted that our subjects would evidence higher than expected levels of depressive distress than those found in previous studies of white homosexually active men (there are no published CES-D Scale-based studies of lesbians to the best of our knowledge) and in community samples of black Americans who were presumably primarily heterosexual. Consistent with previous findings regarding sex differences (32), we also predicted that, within our study groups, black homosexually active women would report levels of depressive distress that were equal to or greater than those reported by black men. However, this prediction was somewhat tentative given the occurrence of the HIV epidemic that has disproportionately affected black gay and bisexual men (35) rather than lesbians (36, 37). We further predicted that men with symptomatic HIV infections would report greater depressive distress than the other men in this study, consistent with the overlap between common depressive symptoms and symptomatic HIV disease.

#### Method

#### Subject Recruitment

Subjects were recruited from local and national black gay organizations, blind mailings to businesses patronized by black homosexuals, gay press announcements, and social networks of study participants. Gender-specific questionnaires were mailed in bulk or individually both to organizations and to individuals requesting surveys. Each questionnaire included a prestamped, preaddressed return envelope and a separate postcard for requesting additional surveys for distribution to others. Due to these bulk mailings and method of distribution to an essentially hidden population it is not possible to calculate a true return rate.

#### Subjects

**Female subjects**—African American women (N=603) who reported at least one previous homosexual experience completed questionnaires. Five hundred five (84%) indicated that they considered themselves to be gay or lesbian, 66 (11%) bisexual, and 32 (5%) neither but homosexually active. Their mean age was 33.2 years (SD=7.7, range=18–60). The women reported a median of 15.0 years of education. Approximately 85% were employed; among these, 36% reported professional or technical employment, 29% clerical or sales, 14% management or administration, 10% service work, and 10% skilled or unskilled labor. Questionnaires were returned from 33 of 50 states; approximately 47% of the women lived in California, 22% in the Northeast, 14% in the Midwest, and 8% in the South. Although women were not asked their HIV infection status, HIV infection attributable to lesbian sexual behavior is extremely rare (38).

Male subjects—Homosexually active black men (N=829) were also surveyed. All reported at least one previous homosexual experience; 666 (80%) identified themselves as gay, 119 (14%) as bisexual, and 44 (5%) as neither but currently sexually active with men. The average man was 33.4 years old (SD=8.2, range=18-70) and had completed a median of 15.0 years of education. Approximately 80% were employed; 35% of these reported professional or technical employment, 31% clerical or sales, 18% management or administration, 9% service work, and 6% skilled or unskilled labor. Questionnaires were returned from 41 states, including 25% from California, 23% from the Northeast, 19% from the Midwest, and 15% from the South. By self-report, 296 (36%) of the men did not know their HIV infection status (93% of these had never had an HIV-antibody test); the HIV status of these men was unknown. An additional 296 (36%) had been HIV-antibody negative at their most recent testing, and 237 (29%) were HIV infected, including 120 men (14%) who reported being diagnosed by a physician as having HIV-related disease, including AIDS, AIDS-related complex, or lymphadenopathy. We refer to men who reported HIV infection without self-reported physician-diagnosed HIV disease as asymptomatic HIV-infected men and those with diagnosed HIV disease as symptomatic HIV-infected men.

#### Procedure

Both male and female subjects responded voluntarily to a self-administered questionnaire; a cover letter provided information on the study's purpose as well as assurances of anonymity. The following measures were included:

**CES-D Scale**—This 20-item inventory of common symptoms of depression was developed for use with nonpsychiatric samples (21). Scores range from 0 to 60, and a score of >15 is used to designate probable clinical depression (39). Previous research (40) suggests that

nearly one-third of false positives are due to medical illness because the CES-D Scale, like many psychiatric screening instruments, indexes nonspecific symptoms that commonly occur in the presence of medical illness (41). The CES-D Scale is used as a brief screening instrument for isolating psychologically distressed individuals, most of whom have heterogeneous psychiatric diagnoses and/or depressive symptoms, but it cannot be used for diagnostic purposes (40). Factor analytic studies (42) indicate four dimensions: negative affect, lack of positive affect, somatic symptoms, and interpersonal disruption. Corresponding subscales are scored.

**Life problems**—Subjects rated on 5-point scales the frequency of common problems in 12 areas of living, including suicidal thoughts, and indicated which problem bothered them the most in the previous year. Items were drawn from the National Survey of Black Americans (43). Subjects were not asked about specific suicide attempts.

#### **Data Analysis**

One-way analyses of variance contrasting the four groups of men (symptomatic HIVinfected, asymptomatic HIV-infected, HIV-antibody negative, and HIV status unknown) and the group of women were conducted on dependent variables that were scaled with intervals. Post hoc Student-Newman-Keuls tests were then calculated to examine differences between each pair of means at the p<0.05 level. Categorical data were analyzed by using chi-square tests.

#### Results

#### Levels of Depressive Distress

Overall, the four groups of men and the group of women reported differing levels of depressive distress (F=8.21, df=4, 1427, p<0.001) (table 2). Post hoc comparisons indicated that men with symptomatic HIV-related disease reported significantly higher distress levels than other men, but that they did not differ from the women. Men who were asymptomatic HIV-infected, HIV-antibody negative, and whose HIV status was unknown reported significantly greater distress than men whose HIV status was unknown or men who had tested negative but did not differ from HIV-infected men, regardless of symptomatic status. Using cutoff scores to identify individuals at higher risk for clinical depression, we found that HIV symptomatic men were most likely, and men whose HIV status was unknown least likely, to be classified as depressed ( $\chi^2$ =21.37, df=4, p<0.001).

Similar analyses of CES-D Scale subscales also showed differences across the five groups of subjects in levels of negative affect (F=5.36, df=4, 1427, p<0.001), lack of positive affect (F=2.78, df=4,1427, p<0.05), and somatic symptoms (F=19.12, df=4, 1427, p<0.001), although there was no difference in levels of interpersonal problems (F=1.78, df=4, 1427, p>0.10). Post hoc comparisons indicated that symptomatic HIV-infected men reported significantly more negative affect than men whose HIV status was unknown and HIV- antibody negative men and less positive affect than all other groups of men as well as the women. Both the women and the symptomatic HIV-infected men reported significantly higher levels of somatic complaints than the other three groups of men. After controlling for HIV status and gender, no differences in CES-D Scale total scores were found among those who identified themselves as gay, bisexual, or other (F=0.54, df=2, 1426, p>0.10).

#### **Presence of Suicidal Ideation**

Five percent of the symptomatic HIV-infected men reported that their most upsetting life problem was suicidal thoughts (table 2). Prevalence of troublesome suicidal thoughts was

significantly more frequent in symptomatic men (F=4.02, df=4, 1416, p<0.01). Post hoc comparisons indicated that symptomatic men reported being troubled by suicidal thoughts more frequently than HIV-antibody negative men, men whose HIV status was unknown, and women.

#### **Comparison With Previous CES-D Scale-Based Studies**

Estimates drawn from previous research using the CES-D Scale where means and standard deviations were reported (table 1) indicated that our subjects reported higher than expected levels of depressive distress. Although published norms for African Americans predict mean CES-D Scale scores in the range of 9.9 to 11.5, the mean for our male and female subjects was 13.6 (SEM=0.28; 99% confidence interval=12.9–14.3). Comparisons within gender also indicated higher than expected distress levels. Previous studies reported a mean CES-D Scale score of 9.8 for black men and 11.5 for black women, but in our study the mean for the men was 12.8 and the mean for the women was 14.7.

The men in our current study also evidenced greater depressive distress than did the gay men in previous CES-D Scale-based studies who were unselected for ethnic background (approximately 90% of these subjects were white) (table 1). We did not find any previous CES-D Scale-based research on lesbians.

#### Discussion

Our major objective was to determine rates of depressive distress in large, heterogeneous groups of homosexually active black men and women. Findings indicate higher levels of depressive distress among these individuals than would be expected based on their ethnic background, gender, or sexual orientation alone. When the CES-D Scale scores of our subjects were compared with previous research on predominantly heterosexual African Americans, our subjects clearly reported greater depressive distress. In earlier community-drawn studies (24, 26, 30), approximately 23% of black men (presumably predominantly heterosexual) scored above 15 on the CES-D Scale, but in the current study, 33% of the black men did. Earlier community studies of black women suggest that approximately 26% scored in the depressed range, but in our study, 38% scored in the higher range.

Although AIDS-related symptoms may account for some of the higher rates of distress observed in the self-reports of the men in our study, comparing the men surveyed here with primarily white gay men studied in previous AIDS-related research indicates that our subjects experienced greater than expected levels of distress. This suggests that well-documented ethnic differences in depressive distress between blacks and whites also exist within homosexually active populations. Unfortunately, no comparison is possible between the black women in our study and white lesbians.

Because accurate calculation of population norms requires random sampling, something not possible with hidden populations such as the one we studied, we cannot conclude definitively that we have correctly estimated population measures. However, both the methods by which the subjects were nationally recruited (using diverse social networks within the black homosexually active population) and the size of the study groups provide reassurance for the generalizability of our findings.

Nevertheless, two factors may have exerted influence on our findings. First, since participation involved self-administered questionnaires, the less educated segment of the black homosexually active population was most likely underselected into our study. Although our subjects may differ in educational status from those in previous studies of African Americans who were assessed by interview, they may also be more similar to

subjects in other existing studies of educated gay men that share similar sampling and participation characteristics. In the former case, the differences observed may be underestimated because higher educational levels covary negatively with the CES-D Scale (31); in the latter, similar selection bias would support our findings of differences between black and white gay men.

Second, the influence of HIV infection on depressive distress was measured through self-report, and only for men. Although research has shown that self-reported HIV status is generally reliable (44), a small percentage of men may not have reported their status honestly, and some, uninfected when last tested, may have acquired an infection in the intervening time period. Although the women's HIV status was not assessed, HIV infection has a low prevalence rate among lesbians, for whom virtually all HIV infections are acquired through heterosexual behavior or intravenous drug use (36–38). Only 0.8% of AIDS cases among women reported to the Centers for Disease Control as of September 30, 1989, were in women who had had sex only with other women since 1977 (36). Ninety-five percent of these women were infected through intravenous drug use (36). Although we did not specifically ask about intravenous drug use, there is little reason to believe, given the educational and employment profile of the women sampled, that we recruited predominantly from among women using intravenous drugs.

Nevertheless, the present study demonstrates quite clearly that black homosexually active individuals experience relatively high levels of depressive distress. Consistent with previous research on sex differences, women showed higher levels of distress than men, except for those men with HIV infection, whose scores may have been influenced by their physical symptoms or the effects of coping with a life-threatening infection. Symptomatic HIV-infected men were also more likely to report more frequent suicidal ideation than others.

Although the causes for our findings are unclear, one can speculate that they may, in part, be a function of the interactive nature of stigmatization for being homosexual, for being a racial/ethnic minority, and, in the case of the women, for being female. Thus, individuals who carry multiple lower social statuses may be particularly at risk for depressive distress. It has been suggested that the greater the social disadvantage of a group, the greater the impact of life events (45). Elsewhere (46), HIV-infected black gay men have been found to have more difficulty than white gay men in coping with AIDS-related stressors. It may be that homosexually active African Americans are subjected to a larger number of negative life events than their white counterparts and/or have fewer resources to use in coping with them. Only future research can clarify this issue.

Although the CES-D Scale measures depressive distress and cannot be used reliably to make clinical diagnoses of depression (40), our findings hint that homosexually active African Americans may be especially vulnerable to depressive psychiatric disorders. Despite the relatively high levels of distress, however, targeting psychiatric interventions may not be an easy task. Many African Americans do not seek help for depression until it has reached a severe stage (47). Help-seeking may be influenced by such factors as cost of treatment, stigma, lack of services targeted to the specific needs of our study population, or concerns about bias from providers, many of whom may be unfamiliar with the life experiences of black gay men, lesbians, bisexuals, and other homosexually active individuals. Future research is needed to identify specific critical stressors for homosexually active African Americans and the most effective means for delivering needed psychiatric services. This is particularly relevant given the especially deleterious effects of the AIDS epidemic on the black community in general and black homosexually active men specifically (35).

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#### TABLE 1

## CES-D Scale Mean Scores From Previously Published Studies and Current Study of Depressive Distress in Community Subjects<sup>a</sup>

Survey Subjects	Estimated Mean Score	99% Confidence Interval
American men (90% white) (22)	7.1	6.6–7.6
Gay men (more than 90% white) (16, 19, 20)	9.9	9.6–10.2
Black Americans (22–26)	10.7	9.9–11.5
Black men (24, 25, 27) <sup>b</sup>	9.8	
Black women (24, 26, 27) <sup>b</sup>	11.5	
White Americans (22)	8.4	8.0-8.8
Black homosexually active men (this study)		
Symptomatic HIV-infected	16.7	14.2–19.2
Asymptomatic HIV-infected	12.8	10.3–15.3
HIV-antibody negative	12.7	11.2–14.2
HIV status unknown	11.4	10.1–12.8
Total	12.8	12.2–13.5
Black homosexually active women (this study)	14.7	13.5–15.9

 $^{a}$ Numbers in parentheses refer to studies from which data were drawn. A score of >15 is used to identify individuals with probable clinical depression.

 $b_{\mbox{Insufficient}}$  data reported to calculate standard errors of the mean.

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# **TABLE 2**

Depressive Distress and Frequency of Suicidal Thoughts Among Homosexually Active African American Men and Women<sup>a</sup>

Men

Item	Total (N	( <b>=829</b> )	Symptomatic HIV-infected (N=12	20) A	symptomatic HIV-infected (N=117)	H (	IV-Antibody Negative (N	( <b>=296</b> )	HIV St Unkn (N=2)	tatus own 96)	Women (N	=603)
	Mean	SD	Mean S	sp	Mean SD	a	Mean	SD	Mean	SD	Mean	SD
CES-D Scale score												
Negative affect b	4.6	4.4	$6.0_{a}$ 5	5.0	4.7 <sub>abc</sub> 4.4	4	$4.6_{ m bc}$	4.3	$4.0_{\rm c}$	4.1	$5.1_{ab}$	4.8
Lack of positive affect <sup>b</sup>	3.2	3.0	4.0 <sub>a</sub> 3	3.1	3.2 <sub>b</sub> 2.9	6	3.1 <sub>b</sub>	3.0	$3.1_{\rm b}$	3.0	$3.2_{\rm b}$	2.8
Somatic symptoms $b$	4.1	3.6	5.7 <sub>a</sub> 4	4.1	4.2 <sub>b</sub> 4.1	Γ.	4.1 <sub>b</sub>	3.3	$3.5_{\mathrm{b}}$	3.1	$5.6_{\mathrm{a}}$	4.2
Interpersonal problems	1.0	1.3	1.1 1.1	1.4	0.8 1.3	.3	1.0	1.4	0.9	1.2	0.8	1.3
Total b	12.8	9.9	16.7 <sub>a</sub> 10	0.5	12.8 <sub>bc</sub> 10.4	4	12.7 <sub>c</sub>	9.6	$11.4_{\rm c}$	9.2	$14.7_{\mathrm{ab}}$	11.2
Frequency of suicidal thoughts <sup>b,c</sup>	1.5	0.9	1.8 <sub>a</sub> 1	1.0	1.6 <sub>ab</sub> 1.0	0	1.4 <sub>b</sub>	0.9	1.5 <sub>b</sub>	0.9	$1.5_{b}$	0.9
	N	%	Ν	%	% N	%	Ν	%	N	%	N	%
Subjects scoring >15 on CES-D Scale $b$	270	32.6	56 46	6.7	37 31.6	9	100	33.8	LL	26.0	231	38.3
Most upsetting life problem is suicidal thoughts	30	3.6	6 5	5.0	3 2.6	.6	10	3.4	11	3.7	26	4.3
<sup>a</sup> Statistical analyses contrast status determined by self-rep	ed the four ort.	r classific	cations of men and the group of wome	nen. Dif	ferent subscripts in the same horizonts	tal row	indicate groups that differ	· signific	antly in p	ost hoc o	comparisons	, HIV

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 $^{b}_{p<0.05}$  (ANOVA), evaluated across the four classifications of men and the group of women.

 $c_{\rm r}$  Responses on a 5-point scale on which 1=not at all and 5=most of the time.