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Brief Report

Help-Seeking for AIDS-Related Concerns: A Comparison of Gay Men with Various HIV Diagnoses[1]

Robert B. Hays,[2] Joseph A. Catania, Leon McKusick, and Thomas J. Coates
Center for AIDS Prevention Studies, University of California, San Francisco

Examined help-seeking and psychological distress among four groups of gay men (30 AIDS-diagnosed, 107 HIV-seropositive, 149 HIV-seronegative, 244 untested) in the AIDS Behavioral Research Project, a longitudinal survey of San Francisco gay men. The men reported high levels of anxiety, depression, and help-seeking from their social networks. AIDS-diagnosed and HIV-positives reported the most AIDS worry and were the most likely to seek help. High percentages of AIDS-diagnosed men sought help from all sources (peers, professionals, family), whereas nondiagnosed men were more likely to seek help from peers. Regardless of the men's HIV status, peers were perceived to be the most helpful source. Family members were less likely sought and perceived as least helpful. The strengths and limitations of peers as social support providers for AIDS-related concerns are discussed, including implications for the design of community programs to enhance the abilities of peer helpers.

The AIDS epidemic confronts the gay community with a wide range of profound stressors. Gay men may be coping with the stress of their own illness, witnessing the sickness and death of friends and acquaintances, attempting to modify their life-style to protect their health, deciding whether or not to

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[2]All correspondence should be sent to Robert B. Hays, Center for AIDS Prevention Studies, University of California, 74 New Montgomery Street, Suite 600, San Francisco, California 94105.

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take the AIDS antibody test, or confronting the increasing violence and threats of discrimination directed at the gay community (Christ & Weiner, 1985; Forstein, 1984; Martin, 1988; Morin, Charles, & Malyon, 1984; Stulberg & Smith, 1988). Considerable research has demonstrated that an individual's social network can buffer the impact of a wide variety of stressful life experiences, including those related to physical illness (DiMatteo & Hays, 1981; Taylor, Falke, Shoptaw, & Lichtman, 1986; Wortman & Conway, 1985). However very little is known about the extent to which gay men use social network resources and how effective these sources are in coping with AIDS-related concerns.

This study compared patterns of help-seeking among four groups of gay men: men who (a) were diagnosed with AIDS, (b) had tested positive for antibodies to the human immunodeficiency virus (HIV), (c) had tested negative for HIV antibodies, and (d) were unaware of their HIV status. We examined three main questions: (a) How do these groups differ in terms of AIDS-related worry, anxiety, and depression? (b) To what degree do each of these groups seek help for their AIDS-related concerns from different sources (peers, family, or professional help sources)? and (c) How helpful are the different sources perceived to be?

An understanding of the help-seeking patterns of gay men with regard to AIDS concerns, and how those might vary depending on the individual's HIV status, is particularly important now as the number of AIDS cases continues to grow and public health officials strive to design comprehensive, cost-effective support services for their communities. Community services for gay men are likely to be effective to the degree to which they are consistent with the help-seeking norms and patterns of the gay male subculture (Catania *et al.*, 1990; Gonzales, Hays, Bond, & Kelly, 1983). Further, examining the extent and manner in which an individual's HIV status may influence help-seeking patterns is essential in planning how best to allocate resources for community services for AIDS-affected populations.

Given the catastrophic and stigmatizing nature of HIV illness (Christ & Weiner, 1985; Forstein, 1984), we expected men who were diagnosed with AIDS and those who were HIV-positive to report more anxiety, depression, and AIDS-related worry than men who knew they were HIV-negative. Since emotional distress serves as a motivator for help-seeking behavior (Gross & McMullen, 1983), we expected the AIDS-diagnosed and HIV-positive men to engage in more help-seeking than men who were seronegative. We had no definitive hypotheses regarding the levels of distress or help-seeking among men who were unaware of their HIV status. One could argue that a high degree of anxiety surrounding HIV and testing issues (cf. Coates & Lo, 1989) may be the reason these men avoid learning their HIV status and that the ensuing uncertainty of their status may serve to compound their anxiety.

On the other hand, it may be the case that these men feel confident that they have not been infected with HIV—or are in a state of denial regarding their likelihood of being infected—and so experience little emotional distress or desire to seek help from others.

With regard to choice of help source for AIDS-related concerns, we hypothesized that gay men, regardless of their HIV status, would turn to peers more than to family members or professional helpers as their major source of help. Further, we hypothesized that peers would be perceived as the most helpful source of support for gay men. These hypotheses follow from several lines of reasoning. First, gay men's social support networks tend to be more peer-oriented than the networks of heterosexuals, which tend to be more family-oriented (Kurdek, 1988). Second, gay men may be more reluctant than heterosexuals to seek help from professional sources such as psychologists or clergy which historically have viewed homosexuality as abnormal. Third, the stigma and potential for discrimination associated with AIDS and homosexuality may motivate gay men to conceal AIDS-related concerns from individuals, such as family members, physicians, or co-workers, whose approval they value or who are perceived as influencing their access to desired resources (e.g., health insurance, finances, employment opportunities). Finally, the general preference for individuals under stress to affiliate with individuals experiencing a similar situation as themselves (Schachter, 1959) may serve to draw gay men toward other gay men as their primary sources of support.

METHOD

Participants and Procedures

The data for this study come from the AIDS Behavioral Research Project (ABRP), an ongoing longitudinal survey of San Francisco gay men who have been followed since 1984. The ABRP was designed initially to determine the impact of the AIDS epidemic on two groups of gay men: those at extreme risk of AIDS and those whose behavior potentially protected them from AIDS infection. The details of the recruitment process and research design have been described in previous reports (McKusick, Horstman, & Coates, 1985; McKusick, Wiley, et al., 1985). Men were recruited initially in 1983 and 1984 at gay bars, bathhouses, and by advertising for individuals in committed relationships and single men who were celibate. A total of 728 men were enrolled in the sample in 1984. The majority of the sample was Caucasian (91%), had professional or white-collar occupations (77%), and had some college education (68%). Respondents have been mailed self-

administered questionnaires at 1-year intervals, which they are asked to complete and return by mail. At the third annual follow-up (November 1987), data were collected from 574 individuals, representing a 79% response rate of those originally enrolled in the study. An additional 6% (49 men) were known to have died. Attrition analyses comparing respondents who remained in the sample from 1984 to 1987 with those who did not revealed no significant differences on key variables such as age, relationship status, and sexual behavior patterns (help-seeking patterns were not assessed prior to 1987), indicating that participants in the 1987 wave are not a biased representation of the original sample.[3]

The individuals in the present analysis were 530 men who responded to questions in the 1987 survey about help-seeking, HIV status, and psychological distress. The sample included 30 men who were diagnosed with AIDS, 107 men who knew themselves to be HIV antibody positive, 149 men who knew themselves to be HIV antibody negative, and 244 men who had not been tested for antibodies to HIV. The men ranged in age from 22 to 66 years (M = 39.01, SD = 8.25) and had a mean annual income of $25,000.

Measures

HIV Status. Respondents were asked whether they had obtained HIV antibody testing and, if so, to indicate the test results. They were also asked whether they had been diagnosed with AIDS. The sample was thus divided into four mutually exclusive groups: AIDS-diagnosed, HIV-seropositive but not diagnosed with AIDS, HIV-seronegative, and those who had not been tested and were not diagnosed with AIDS.

Help-Seeking. Respondents were asked whether they had experienced concerns or worries about AIDS during the past year and whether they had sought help from anyone in dealing with those concerns during the preceding year. Those respondents who indicated they had sought help were asked to complete a checklist of help sources used in the preceding year. Seven potential help sources were listed, chosen to represent the categories of support providers most commonly mentioned in the help-seeking literature (Croog, Lipson, & Levine, 1972; Gross & McMullen, 1983) and likely to be relevant for gay men. These included primary partner, friends, parents, siblings, counselor/psychologist, medical doctor, and

[3]Procedures for HIV antibody testing had not yet been developed when this study was initiated in 1984. By 1986, HIV testing was widely available and 35% of the men in our sample had learned their HIV status. Chi-square analysis showed that 1986 HIV status was not associated with whether men remained in the study in 1987.

clergy/spiritual leader. Respondents were asked to indicate from which, if any, sources they had sought advice, treatment, or emotional support for AIDS-related concerns. An index of the number of help sources used was computed by counting each of the different sources from whom a respondent indicated having sought help. Respondents were also asked to rate the helpfulness of each source used on a 5-point Likert scale which ranged from *extremely harmful* (1) to *extremely helpful* (5). Three general categories of help sources were created by averaging the ratings of partner and friends to form *peers,* parents and siblings to form *family,* and counselor/psychologist, medical doctor, and clergy/spiritual leader to form *professional helpers.*

Anxiety and Depression. Respondents completed the Brief Symptom Inventory (Derogatis & Melisaratos, 1983), which included six-item scales of anxiety and depression.

AIDS-Worry. A three-item scale was used to assess degree of AIDS-related worry. Using a 6-point Likert scale, respondents were asked to rate their level of agreement (1 = strongly disagree, 6 = strongly agree) with each of the following statements: "I think about the threat of AIDS at least once a day"; "Among all diseases AIDS is the greatest threat to my health"; and "I am fearful of getting AIDS." Cronbach's alpha for this scale was .71. In addition, respondents who had not been diagnosed with AIDS rated their perception of the likelihood they would "eventually develop AIDS" on an 11-point scale ranging from (0%) *definitely will not happen* to (100%) *definitely will happen.*

RESULTS

Group Comparisons

Demographics. Multivariate analysis of variance (MANOVA) was performed to examine whether men who differed in HIV status were different from each other in age, education, or income. The significant MANOVA, $F(9, 1337) = 7.73$, $p < .004$, was followed by univariate analyses of variance which revealed a significant effect only for income, $F(3, 449) = 5.74$, $p < .001$. Scheffé post-hoc comparisons indicated that seronegatives reported higher mean incomes than men diagnosed with AIDS and untested men ($p < .05$). To control for the differences in income among the groups, income was included as a covariate in all of the subsequent analyses.

Psychological Distress. The men reported relatively high levels of anxiety ($M = 0.71$; T score = 64) and depression ($M = 0.85$; T score = 65).

Published norms for male nonpatient populations are 0.18 and 0.06, respectively (Derogatis & Melisaratos, 1983). Thus on each subscale this sample scored approximately 1½ standard deviations above the norm. Multivariate analysis of covariance (MANCOVA) with income included as a covariate was conducted to compare levels of psychological distress among men in each of the HIV groups. A significant group effect emerged, $F(9, 1511) = 5.33$, $p < 0.02$, which was further examined by univariate analyses of covariance. The results showed no differences between the groups in levels of anxiety or depression, however HIV status was associated with the men's degree of AIDS-related worry, $F(3, 507) = 12.54$, $p < .001$. The results of Scheffé comparisons of all possible means ($p < .05$) indicated that seropositive and AIDS-diagnosed men reported more worry (both means = 15.2) than seronegative men ($M = 12.4$) and untested men ($M = 13.5$). Perceptions of one's likelihood of developing AIDS were also clearly associated with HIV status. Seropositive men felt the probability was 57% that they would eventually develop AIDS; untested men felt their chances were 30% and seronegatives 14%, $F(2, 481) = 101.93$, $p < .001$.

Help-Seeking

Significantly greater percentages of AIDS-diagnosed (96%) and seropositive (82%) men sought help for AIDS concerns during the past year than did seronegative (77%) and untested (72%) men, $\chi^2(3) = 9.17$, $p < .03$. In order to compare men who sought help from those who did not in terms of their levels of psychological distress, a multivariate analysis of covariance (MANCOVA) was performed. The independent variables were (a) whether or not the individual had sought help, and (b) HIV status. Income was included as a covariate. The dependent variables were anxiety, depression, and AIDS-related worry. A main effect for help-seeking emerged, $F(3, 494) = 3.07$, $p < .03$. Subsequent univariate ANCOVAs indicated that men who sought help reported significantly more AIDS-related worry, $F(1, 496) = 8.14$, $p < .005$, than men who did not seek help. There was no interaction with HIV status.

Sources of Help-Seeking

Number of Sources. ANCOVA was used to examine whether the number of different help sources the men sought was associated with HIV status. The independent variable was HIV status; the dependent variable was the number of different help sources the respondents reported having

Table I. Percentages of Gay Men Seeking Help from Various Sources

Help source	AIDS-diagnosed	HIV +	HIV −	Untested
Peers	96	80	75	72
Friends	96	80	71	67
Primary partner	68	53	53	43
Professionals	96	66	64	46
Medical doctor	92	63	49	35
Counselor/psychologist	68	30	27	23
Clergy/spiritual leader	48	17	19	15
Family	92	52	44	41
Siblings	92	41	43	36
Parents	76	44	38	34

used during the preceding year. Income was included as a covariate. The main effect for HIV status, $F(3, 410) = 13.85, p < .001$, which was further examined by Scheffé tests ($p < .05$), indicated that men diagnosed with AIDS sought help from a significantly greater number of different sources ($M = 5.4$) than did seropositive ($M = 3.2$), seronegative ($M = 3.0$), and untested men ($M = 2.51$).

Types of Sources. Table I presents the percentages of men who reported seeking help from each category of source. A 4 (HIV Group) × 3 (Help Source) MANCOVA, with help source as a repeated measure, was performed to examine whether HIV status was associated with degree of help-seeking and choice of help source.[4] The results indicated that the various HIV groups differed significantly in their extent of help-seeking, $F(3, 415) = 9.41, p < .001$. Scheffé tests showed that greater percentages of AIDS-diagnosed men sought help than did men in the three other groups ($p < .001$). Though less than the AIDS-diagnosed men, HIV positives were more likely to seek help than HIV negatives and untested men ($p < .03$). However, the significant main effect for Help Source, $F(2, 415) = 41.09, p < .001$, and HIV Group × Help Source interaction, $F(6, 828) = 2.55, p < .02$, revealed that the men did not seek help equally from the various sources. The AIDS-diagnosed men sought help fairly equally from each category of help source. For each of the other groups, peers were the most widely sought source of help, followed by professional sources and family members (all ps $< .02$).[5]

[4]Although MANCOVA is generally used with continuous dependent variables, the robust nature of the analysis does permit its use with dichotomous dependent variables (Cohen & Cohen, 1983; Overall, 1980).

[5]In order to investigate whether the help-seeking patterns of men who had a primary partner differed from men who did not, this analysis was repeated including "presence/absence of primary partner" as an independent variable. The lack of a significant main effect or interaction indicated that relationship status did not substantially alter help-seeking patterns.

Table II. Helpfulness Ratings of Various Sources by Gay Men of Each HIV Status Group

	AIDS-diagnosed		HIV+		HIV−		Untested	
Help source	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Peers	4.43	0.47	4.35	0.76	4.27	0.69	4.14	0.81
Primary partner	4.41	0.71	4.46	0.78	4.13	1.04	4.06	0.93
Friends	4.46	0.59	4.14	0.89	4.13	0.83	4.03	0.83
Professionals	4.05	0.74	3.87	0.82	3.96	0.72	3.78	0.92
Counselor/psychologist	41.2	0.86	4.10	0.94	4.06	0.80	3.88	1.03
Medical doctor	4.22	0.90	3.93	1.01	3.83	0.84	3.66	0.91
Clergy/spiritual leader	3.83	0.94	3.75	0.86	3.73	1.08	3.50	1.00
Family	3.68	0.92	3.43	0.73	3.39	0.88	3.18	0.68
Siblings	3.74	0.86	3.50	0.75	3.41	0.80	3.32	0.77
Parents	3.74	1.20	3.44	0.96	3.24	1.03	3.18	0.73

Perceived Helpfulness of Sources

An analysis of covariance with repeated measures was performed to compare the perceived helpfulness of different sources. The independent variables were (a) help source (peer, family, professional) and (b) HIV status. The dependent variable was the respondent's rating of the helpfulness of the source. Income was again included as a covariate.[6] The results showed that the various help sources were not perceived to be equally helpful, $F(2, 151) = 59.65$, $p < .001$. There was no significant main effect nor interaction associated with HIV status. Scheffé tests indicated that peers were rated as significantly more helpful than the other two sources, and professional helpers were rated as more helpful than family members (all *p*s $< .001$). Table II presents mean ratings of the helpfulness of each source by men in each HIV group. As can be seen, friends and primary partners were considered the most helpful, whereas parents and siblings were uniformly perceived to be the least helpful, regardless of the men's HIV status. Ratings of the degree of helpfulness of peers were negatively correlated with anxiety and depression scores (both *r*s $= -.16$, $p < .001$), whereas the helpfulness of family and professional sources was not significantly associated with distress scores.

[6]Since this analysis used a repeated-measures design, only respondents who reported seeking help from each category of help source (peers, professional, family) were included in this analysis. The mean helpfulness ratings of these respondents were essentially indentical to the means for the total sample, thus the respondents included in this analysis were judged not to be a biased representation of the total sample.

DISCUSSION

The gay men in this sample, drawn from an AIDS epicenter, reported both high psychological distress and a high degree of help-seeking from their social networks. The high levels of anxiety and depression among men within *each* HIV status group were surprising and are testimony to the profound psychological needs within gay communities ravaged by the AIDS epidemic. Gay men who were diagnosed with AIDS or knew themselves to be HIV-seropositive understandably reported the most AIDS-related worry and were the most likely to seek help for AIDS concerns. High percentages of men diagnosed with AIDS sought help from all categories of sources (peers, professionals, and family), whereas seropositive, seronegative, and untested men were more likely to seek help from peers. Regardless of the men's HIV status, peers were perceived to be the most helpful source. Further, peers appeared to be the most effective source of support for gay men, with the perceived helpfulness of one's peers associated with less anxiety and depression. These findings corroborate those of previous researchers (Hays, Chauncey, & Tobey, 1990; Kurdeck, 1988) who have emphasized the primary role of one's friends and lovers in gay men's social support networks.

There are many advantages to using peers as help sources, including that they can easily empathize, are readily accessible, share a common culture, and offer opportunity to reciprocate the help received (Gonzales et al., 1983). However, characteristics of the AIDS epidemic can make reliance on gay peers as one's primary source of support especially problematic. First, since virtually all gay men are likely to be experiencing some degree of personal distress associated with AIDS (e.g., Martin, 1988), individuals may be limited in the amount of emotional resources they are able to offer to others. Second, the personally threatening nature of AIDS may interfere with the abilities of some gay men to provide effective support to others. For example, a seropositive man may overidentify with a peer in advanced stages of AIDS. Third, gay men may be overloaded in their role as help sources if a large number of one's friends are simultaneously in need of support. Fourth, since AIDS has decimated entire social networks within the gay community, many gay men may no longer have close friends they can turn to for support. These factors suggest that community mental health professionals can be valuable in developing strategies for promoting the abilities of peers as support providers, preventing burnout among peer helpers, and providing alternative sources of help for men who lack supportive peer networks. Programs that use gay men as support providers (e.g., drop-in centers, "buddy" programs, telephone hotlines) or bring together gay men in a supportive context (e.g., mutual support groups)

represent potentially valuable methods of facilitating peer-helping within the gay community.

In contrast to studies of help-seeking among heterosexuals for whom family tends to play the primary support role for individuals (Croog et al., 1972; Drabek & Boggs, 1968), the gay men in this sample were significantly less likely to seek help from family members and perceived family as the least helpful. The reluctance of gay men to seek help for AIDS concerns from family members may stem from several sources. First, many gay men may feel estranged from their families, particularly if their family members do not accept or understand their gay life-style. Second, gay men who are not open about their homosexuality with their families may be motivated to avoid the topic of AIDS because of its association with homosexuality. Third, given the highly emotionally charged nature of AIDS, gay men may avoid discussing AIDS with their families because they feel family members might overreact or worry exceedingly about them. Fourth, gay men may not feel heterosexual family members have sufficient information or understanding about AIDS and gay culture to provide helpful support. It is important to point out, however, that the AIDS-diagnosed men in our sample differed from the other groups of men in that 92% *did* seek help from family members. This may be due in part to the increasing and changing needs elicited as HIV illness progresses (Christ & Weiner, 1985; Forstein, 1984). In addition, as Patten and Walker (1989) have discussed, gay men often attempt to "reconnect" with previously estranged family members following an AIDS diagnosis. These findings suggest an increased role for gay men's family members as HIV illness progresses; yet, as discussed above, family members may be ill-prepared to provide effective support for AIDS issues. Suggestive evidence for this comes from Hays et al. (1990) who found that gay men with AIDS whose support networks consisted of a high percentage of family members experienced greater psychological distress than men whose networks included a high percentage of peers. Interventions that help family members provide effective support for gay loved ones with AIDS may be extremely valuable.

The relatively high degree of help-seeking from professionals reported in this sample is also noteworthy and may reflect both the seriousness of the concerns AIDS elicits as well as the fact that San Francisco has numerous professionals who are either gay-identified or sufficiently sensitive to gay issues to elicit the trust of gay men. Although not assessed in this study, previous researchers have examined the significant "informal counseling" role played by individuals such as bartenders and hair stylists, whose occupational role brings them into contact with large numbers of individuals who confide in them about personal problems (Bisonnette, 1977; Weisenfeld & Weiss, 1979). Assessments of the degree to which gay men

receive help for AIDS-related concerns from individuals who are not in traditional mental health professions would be an interesting and valuable inclusion in future research of this nature. Since gay men are disinclined to turn to family for help in dealing with AIDS issues, community interventions which incorporate a creative blend of peer-helping, gay-sensitive professional services, and natural community resources may be especially valuable and warranted.

There are a number of limitations to the research presented here. The broad scope of the AIDS Behavioral Research Project precluded assessing each variable as intensively as we would have liked. For example, it would be useful to know the frequency with which gay men seek help from the various sources and whether this varies with HIV status. Indeed, our data may actually underestimate the role of peers as helpers. Previous research has shown that gay men interact more frequently with friends than relatives (Hays et al., 1990), thus gay men not only may be more likely to seek help from peers but may do so more frequently. In addition, the definition of support employed here was limited to "advice, treatment, and emotional support." Whether the help-seeking patterns found also apply to more instrumental forms of support (help with household tasks, borrowing money, etc.) is a valuable question for future research. Patterns of help-seeking may also change over the course of the AIDS illness. Future research should also include more detailed assessments of where individuals fall on the HIV illness continuum (whether seropositives are symptomatic or not, time since AIDS diagnosis, etc.). Likewise, assessments of help sources not included here, such as extended-family members and community organizations (support groups, telephone hot lines, etc.) would provide a more complete view of help-seeking patterns among gay men.

In addition, a variety of factors may limit the generalizability of the findings. First, the sample was predominantly while and middle-class. Help-seeking patterns may differ for gay men of different ethnic and socioeconomic groups. Second, characteristics of San Francisco's gay community may be different from other communities in important ways that may influence help-seeking. The fact that many gay men have moved here from other states may make family members less available or convenient as help sources than may be true for men in other communities. Further, the relatively high degree of organization and information available in San Francisco's gay community may make peers more informed and competent in dealing with AIDS concerns than gay men from other communities. In addition, there may be more professional services available to the gay community than is true for other areas. The fact that this sample has been repeatedly surveyed regarding the AIDS epidemic may also contribute to their being more aware of AIDS issues and concerns than other gay men,

which may have served as a catalyst for greater help-seeking than would be the case for men who had not been research participants.

This study has presented a general overview of the help-seeking patterns of gay men confronting the AIDS crisis. Future research is needed to examine more thoroughly the specific types of help sought from each source, factors that contribute to men choosing one source over another, and factors that distinguish effective help-giving from less effective help-giving. In addition, the design and evaluation of interventions to mobilize peer helping and prevent burnout among peers within AIDS-affected communities should be a high priority for mental health professionals.

REFERENCES

Bisonnette, R. (1977). The bartender as mental health service gatekeeper: A role analysis. *Community Mental Health Journal, 13,* 92-99.

Catania, J. A., Coates, T. J., Kegeles, S. M., Ekstrand, M., Guydish, J., & Bye, L. (1990). Implications of the AIDS risk reduction model for the gay community: The importance of perceived sexual enjoyment and help-seeking behaviors. In V. Mays, G. Albee, J. Jones, & J. Schneider (Eds.), *Psychological approaches to the prevention of AIDS.* Beverly Hills: Sage.

Christ, G. H., & Weiner, L. S. (1985). Psychosocial issues in AIDS. In V. T. DeVita, S. Hellman, & S. A. Rosenberg (Eds.), *AIDS: Etiology, diagnosis, treatment and prevention.* Philadelphia: J. B. Lippincott.

Coates, T. J., & Lo, B. (1989). *Counseling persons who are seropositive,* Unpublished manuscript, Center for AIDS Prevention Studies, University of California, San Francisco.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Croog, S., Lipson, A., & Levine, S. (1972). Help patterns in severe illness: The role of kin network, nonfamily measures and institutions. *Journal of Marriage and the Family, 34,* 32-41.

Derogatis, L. R., & Melisaratos, N. (1983). Brief Symptom Inventory (BSI): An introductory report. *Psychological Medicine, 13,* 595-605.

DiMatteo, M. R., & Hays, R. (1981). Social support and serious illness. In B. H. Gottlieb (Ed.), *Social networks and social support in community mental health.* Beverly Hills: Sage.

Drabek, T. E., & Boggs, K. S. (1968). Families in disaster: Relations and relatives. *Journal of Marriage and the Family, 30,* 443-451.

Forstein, M. (1984). The psychosocial impact of the acquired immune deficiency syndrome. *Seminars in Oncology, 11*(1), 77-82.

Gonzales, L. R., Hays, R. B., Bond, M. A., & Kelly, J. G. (1983). Community mental health. In M. Herson, A. E. Kazdin, & A. S. Bellack (Eds.), *The clinical psychology handbook.* Elmsford, NY: Pergamon.

Gross, A. E., & McMullen, P. A. (1983). Models of the help-seeking process. In B. M. DePaulo, A. Nadler, & J. D. Fisher (Eds.), *New directions in help-seeking: Vol. 2. Help-seeking.* New York: Academic Press.

Hays, R. B., Chauncey, S., & Tobey, L. (1990). The social support networks of gay men with AIDS. *Journal of Community Psychology,* in press.

Kurdek, L. A. (1988). Perceived social support in gays and lesbians in cohabitating relationships. *Journal of Personality and Social Psychology, 54,* 504-509.

Martin, J. L. (1988). Psychological consequences of AIDS-related bereavement among gay men. *Journal of Consulting and Clinical Psychology, 56,* 856-862.

McKusick, L., Hortsman, W., & Coates, T. J. (1985). AIDS and sexual behavior reported by gay men in San Francisco. *American Journal of Public Health, 75,* 493-496.

McKusick, L., Wiley, J. A., Coates, T. J., Stall, R., Saika, G., Morin, S., Charles, K., Horstman, W., & Conant, M. (1985). Reported changes in the sexual behavior of men at risk for AIDS, San Francisco, 1982-84: The AIDS Behavioral Research Project. *Public Health Reports, 100*(6), 622-628.

Morin, S. J., Charles, K. A., & Malyon, A. K. (1984). The psychological impact of AIDS on gay men. *American Psychologist, 39,* 1288-1293.

Overall, J. E. (1980). Calculation of adjusted response frequencies using least square regression methods. *Applied Psychological Measurement, 4,* 65-78.

Patten, J. T., & Walker, G. (1989, June). *Gay men with AIDS: Family of choice versus family of origin.* Paper presented at the Fifth International Conference on AIDS, Montreal.

Schachter, S. (1959). *The psychology of affiliation.* Stanford, CA: Stanford University Press.

Stulberg, I., & Smith, M. (1988). Psychosocial impact of the AIDS epidemic on the lives of gay men. *Social Work, 33*(3), 277-281.

Taylor, S. E., Falke, R. L., Shoptaw, S. J., & Lichtman, R. R. (1986). Social support, support groups and the cancer patient. *Journal of Consulting and Clinical Psychology, 54,* 608-615.

Weisenfeld, A. R., & Weiss, H. M. (1979, December). Hairdressers and helping: Influence of informal caregivers. *Professional Psychology,* pp. 786-792.

Wortman, C. B., & Conway, T. L. (1985). The role of social support in the adaptation and recovery from physical illness. In S. Cohen & S. L. Syme (Eds.), *Social support and health.* New York: Academic Press.