

CLINICAL CARE UPDATE: MINORITIES

The Prevention of Psychopathology in African Americans: An Epidemiologic Perspective

Harold W. Neighbors, Ph.D.

ABSTRACT: Although improving the mental health status of African Americans is an important goal, it is not clear that this can be accomplished by increasing access to professional services. Many have argued that stressful social conditions are the major cause of mental disorder in blacks and thus, psychopathology can be prevented by eliminating racism, oppression and poor economic conditions. This review argues that while the notion of primary prevention with African Americans should be taken seriously, there is still a need for more and better epidemiologic research. Three bodies of knowledge relevant to black mental health are addressed: 1) the need for an epidemiologic knowledge base for prevention; 2) coping capacity and vulnerability to stress; 3) risk factor identification. Findings from a national survey of adult African Americans are presented as an example of risk factor identification for the purpose of specifying targets for preventive interventions. The paper concludes that before the prevention of psychopathology in black populations can be achieved, a number of measurement, theoretical and policy issues must be addressed. Specific directions for future research are outlined.

INTRODUCTION

Mental health researchers, planners and service providers generally agree that African Americans are at high risk for the development of

Address all correspondence to: Harold W. Neighbors, Ph.D., Department of Health Behavior and Health Education, School of Public Health, University of Michigan, 1420 Washington Heights, Ann Arbor, Michigan 48109-2029. Many of the ideas for this paper were formulated while the author was supported by an NIMH New Investigator Research Award (NIRA) funded by the Prevention Research Branch. The author would also like to thank James S. Jackson and two anonymous reviewers for comments on earlier drafts of the manuscript. Finally, special thanks to Ms. Johanna Lackner for critical and editorial comments.

mental problems. This assumption is based on three bodies of empirical research. The first is a set of social indicators showing that blacks are economically disadvantaged relative to whites (Health Resources Administration, 1980). The second is the body of literature connecting changes in economic variables to the precipitation of stressful economic life events and eventual changes in mental health status (Catalano & Dooley, 1983). Third, findings from epidemiologic community surveys comparing blacks and whites reveal that African Americans score higher than whites on measures of psychological distress (Neighbors, 1984). There is, however, some ambiguity as to whether the higher rate of distress among blacks is due to the stress of racism or the fact that blacks disproportionately reside in the lower socioeconomic strata (Kessler & Neighbors, 1986; Eaton & Kessler, 1981). The idea that the effects of race on mental health might be explained by the fact that so many African Americans are poor only heightens the practical importance of in-depth investigations of black mental health.

While it is clear that the mental health status of African Americans is an important social problem, there is less agreement on how to improve the emotional well-being of this country's largest minority group. Traditionally, mental health practitioners have waited to intervene once people were already psychologically troubled. The fact that assistance is rarely provided for all who need it has led some to argue that we need to increase access to mental health services for those in psychic pain (Snowden, 1982). It is important to note, however, that many scholars see adverse social conditions as the primary cause of psychological problems among blacks (Hilliard, 1981). As a result, it has been suggested that mental health services targeted toward blacks be reoriented toward creating less stressful social environments (Cannon & Locke, 1977). The assumption here is that greater benefits can be derived from a public health approach to preventing large numbers of African Americans from succumbing to the stresses of racism, oppression and poor economic conditions. Preventive interventions must, however, be based on sound epidemiologic knowledge of the distribution and course of the specific morbidity outcomes to be eliminated.

The fact that very little knowledge exists on what actually works with respect to the prevention of psychopathology in blacks is evident from the National Institute of Mental Health publication entitled, *Primary Prevention in Mental Health: An Annotated Bibliography* (Buckner, Trickett & Corse, 1985). There were only 11 examples of prevention programs dealing specifically with African Americans. Upon closer inspection of these publications, it was revealed that 7 were

critical essays discussing various issues related to the prevention of psychopathology among blacks and the other four were empirical investigations. Three of these four were evaluations of actual preventive interventions (Shure & Spivack, 1979, 1982; Willner et al., 1976), while the fourth was a report of preliminary findings from a national epidemiologic survey (Neighbors et al., 1983). Interestingly, there was some consistency in the themes expressed by the seven critical essays. All mentioned the pervasive negative mental health implications of social conditions connected with poverty, racism and ghetto living. Lack of power, low self esteem and personal competence were also seen as important correlates of oppressive social conditions and mental health status. Emphasis was given to social, political and economic change as the most effective means of primary prevention in low-income black communities (Bloom, 1983; Brooks, 1974; Brower, 1973; Carter, 1981; Hilliard, 1981; Paster, 1977; Paul, 1981).

More recently, a number of articles on the prevention of psychopathology among African Americans have appeared. Maypole and Anderson (1987) described a culturally relevant self-help prevention project called "Soulbeat." The goals of the Soulbeat program were to affect knowledge, values and behaviors related to substance abuse and to disseminate information by developing a manual and videotape. The strength of the Soulbeat approach was that it took advantage of black participation in churches and schools in order to reach African American families. While participation in a 4-session drug education training program was only "marginally effective (Maypole & Anderson, 1987, p. 137), the writers concluded that the project efforts in churches were more successful than those in the schools. It was also felt that there was a significant impact on many of the youngsters who participated in Soulbeat performances. To be a Soulbeater became prestigious, ego reinforcing and fostered the development of group norms that discouraged drug use.

Bell (1987) described numerous activities (e.g. call-in radio programs, surveys of children's attitudes and experiences with violence, formation of support groups for violence victims, vocational programs, offering alternatives to gang activity, involvement with community groups and state legislators) for professionals who are interested in raising consciousness about the serious problems of black-on-black homicide. A major strength of Bell's approach is that he articulates a number of potentially testable etiologic hypotheses as well as specifying three different theoretical orientations (biological, psychological, sociological) which can be used to understand the problem.

Neither Bell's nor Maypole and Anderson's description of preventive activities would technically qualify as preventive interventions because there was no research design. As a result, it was impossible for them to test their theories nor were they able to delineate exactly what was prevented. Thus, from a preventive research perspective, these more recent articles only serve to underscore our previous point—that there remains a lack of empirical prevention research on African Americans.

While this may be a cause for concern, it is also important to view the body of literature on prevention with blacks within a developmental context. As Dressler (1987, pp. 211–212) so appropriately points out, there are at least three major issues which need to be addressed within the prevention topic. The first is the discussion and specification of an etiologic model of the disorder or problem. It is clear that the vast majority of writings reviewed above have focused on this area. The second concerns the nature of the preventive intervention. The articles by Bell and by Anderson and Maypole are excellent examples of attempts to inform a wider audience about what a preventive intervention in the black community should look like. Dressler's third major issue concerns the process of delivering the preventive intervention to the community. Again, Bell, Anderson and Maypole have provided useful information on this topic.

In summary, while the concept of preventing mental disorder in African Americans is of central interest to many, the bulk of the literature has focused on two major areas. The first is theoretical development, primarily within sociological and psychological frameworks which emphasize exposure and response to stress. The second focus has been on the description of programs already in operation within black communities. These programs, if placed within the context of a research design, can be viewed as the eventual interventions necessary for the empirical assessment of a stress-and-coping model of psychopathology.

The purpose of this paper is to focus on the process by which critical components of the stress-and-coping model of psychopathology can be identified. To illustrate this point, findings from the National Survey of Black Americans will be summarized. In this regard, the paper should be viewed as an attempt to move the prevention discussion beyond the realm of the theoretical essay and closer to the goal of linking risk factor research with programs designed to impact upon those risk factors. The point is that in order to make progress in the prevention of psychopathology in African Americans, more epidemiologic studies

which quantify the relationships among key variables like stress, social support and locus of control must be conducted. In addition, service delivery programs (like those described above) should be conceptualized as preventive trials and placed within a research design in order to document their impact.

A Note of Caution

Although the idea of preventing psychopathology in African Americans sounds very promising, we must be careful not to become overly enthusiastic. There are good reasons why we should be cautious about moving too quickly into mental disorder prevention in black communities. Consider for a moment what the concept of "early identification" really means when it is applied to the mental health area. It means that someone will have to tell a black person that they are or could be (in lay terminology) "crazy." This, needless to say, will not be welcome news. We know that there is a tremendous amount of stigma attached to labeling someone with a psychiatric condition. Being labeled as mentally ill is not the same as being labeled with a physical disease. That is, because the correlates of mental disorders are more closely related to social behavior, being labeled mentally ill is more likely to have negative implications for one's social competence and identity (Fabrega, 1975, p. 1503). Most blacks simply will not appreciate being told that they may need psychological help at some time in the future because, statistically speaking, they possess a number of social characteristics indicative of mental problems.

One way to overcome this problem is to learn more about what we are trying to prevent. This would be helpful because the ability to correctly identify specific outcomes decreases the false positive rate and reveals more about the true correlates of the disorder. This knowledge in turn increases the likelihood that preventive interventions will show an effect once they are designed and implemented. Secondly, whenever possible, we should focus on the structural determinants of mental health problems. This method has the potential for reaching a large number of people. In addition, social change approaches avoid the identification of *individuals* as needing mental health services, thereby saving them from the stigma of early psychiatric labeling.

Unfortunately, as important as the strategy of changing social conditions is, it is doubtful that the necessary economic transitions will take place (now or in the near future) on a large enough scale to alleviate the psychological distress poor blacks are experiencing at present. The

implication is that human service workers will have to continue working on methods of lessening personal reactions to the stressful social circumstances faced by blacks and the poor. Thus, when it is necessary to move to person-centered preventive interventions, we should do so with groups who are already experiencing some of the painful effects of stress. This should make it easier for mental health practitioners to justify tampering with the personal lives of African American clients. Hopefully this will help lead high risk blacks to the realization that they could benefit from the assistance of qualified mental health professionals, which should in turn increase their willingness to participate in preventive mental health programs. Such a strategy is certainly less desirable than a primary prevention program, but it may be necessary for avoiding the negative effects of unnecessary labeling. In short, our best effects could come from nonspecific secondary prevention efforts.

Coping Capacity and Responsiveness to Stress

The ultimate goal of prevention is to reduce the incidence of disorder in groups known to be at risk for developing various psychiatric disorders. But before that task can be accomplished, a number of basic epidemiologic research questions have to be answered. For example, we are not very confident that we can measure important mental health outcomes with an acceptable level of precision in community surveys (Anthony et al., 1985; Hendricks et al., 1983). These measurement issues become even more important when cultural differences in distress expression and diagnostic inference are taken into consideration (Good & Good, 1986). Furthermore, studies which have been done are only beginning to show statistically significant relationships between morbidity outcomes and hypothesized risk factors, (Brown & Gary, 1987; Dressler, 1985; Neighbors, 1986).

Most of the epidemiologic studies done on blacks so far have used the symptom checklist method of measuring psychiatric morbidity. Yet we know very little about the overlap between these global distress scales and specific (e.g. DSM-III-R) disorders. For that matter, it is not clear that the black research community has decided that discrete mental disorders are the ultimate concern of its intervention efforts. This is an issue worthy of more attention. In the case of phobia, for example, preliminary results from the Epidemiologic Catchment Area Program report that six-month prevalence rates for all phobias and lifetime rates for agoraphobia were significantly higher for blacks than whites (Myers et al., 1984; Robins et al., 1984). In a series of multivariate analyses

that controlled for a host of demographic variables in testing for race differences in psychiatric morbidity, Warheit et al. (1975) found that the only measure which showed a consistent significant race effect in the multivariate context was the phobia measure.

While it is commonly assumed that blacks and other minorities are exposed to more stress than whites because of discrimination and prejudice (Dohrenwend & Dohrenwend, 1970; Myers, 1982; Moritsugu & Sue, 1983), research on the relationship between minority status and mental health has neglected the study of stressful life events (see Kessler, 1979; Neff, 1985 and Husaini, 1983 for exceptions). Furthermore, many studies which have compared exposure to stress in blacks and whites have not related this information to mental health outcomes (Dohrenwend, 1973; Askenasy et al., 1977; Myers, 1982). Finally, the best studies of stress and distress typically have not emphasized race (Pearlin & Schooler, 1978; Turner & Noh, 1983; Wheaton, 1980). Researchers should begin to realize that skin color is not a very good indicator of the complexities of stress due to race. If it assumed that the unique stress of minority status exposes blacks to more stress than whites, then community epidemiologic studies which are concerned with race must begin to measure such variables.

In addition to focusing on the stress *exposure* hypothesis, psychiatric epidemiologic research has focused upon the differential *response* to stress (Kessler, 1979; Kessler & Cleary, 1980). This line of inquiry seeks to determine how psychiatric risk factors like social support or coping capacity combine to determine how responsive (and thus distressed) one is when exposed to stress. Unfortunately, not many researchers have taken this direction in investigating black mental health. Two notable exceptions are Kessler (1979) and Neff (1985). Neff found no evidence of blacks being more responsive to stress than whites. Kessler's analysis determined, however, that nonwhites were more exposed to stress but that whites would have responded more strongly than nonwhites had the two groups been exposed to the same level of stress. Given that responsiveness is made up of the counterbalancing effects of both internal and external mediating factors, Kessler reasoned that nonwhites may make use of more competent coping strategies because they are disadvantaged, relative to whites, with respect to social resources.

More recently, Ulbrich, Warheit, and Zimmerman (1989) found that race interacted with socioeconomic status to increase psychological symptoms. Specifically, poor blacks were more vulnerable to undesirable events than poor whites, but less vulnerable (than poor whites) to

economic problems. Poor blacks were also more vulnerable than middle-income blacks to the impact of both discrete and economic problems. In short, environmental stress resulted in greater psychological distress for lower status blacks because they were more vulnerable than middle SES blacks and low SES whites to discrete events rather than chronic strains.

These findings highlight the potential utility of focusing more epidemiologic research on the possibility that blacks and whites differ in their vulnerability to stress. That is, future research on race and mental health will need to take exposure and response into account simultaneously. As such, there is a need to focus more of our epidemiologic research on race differences in coping strategies and resources. Some of the major coping patterns hypothesized to be relevant to issues of race are group identification, group consciousness, locus of control (personal and ideological), external attributions (fatalism and system blame), family and kin cohesion, positive comparison processes, religiosity and prayer. All of these variables should be conceptualized as important intervening mechanisms connecting demographic groups and stressful situational circumstances to the development of various forms of psychopathology. In other words, they should be seen as potentially modifiable epidemiologic risk factors. Unfortunately, little research has been done to establish an empirical and quantifiable relationship among these risk factors, social stress, demographic subgroups and the development of psychiatric morbidity. The assumption here is that increased understanding of the various factors that contribute to distress among this group would be valuable information for designing preventive intervention programs.

Risk Factor Identification with Cross-sectional Data

For the most part, the vast majority of community epidemiologic surveys of race and psychological distress have been race comparative in nature, the Parker and Kleiner (1966) study being a major exception. But comparative studies which are not supplemented by research focusing more specifically on subgroup differences *within* the black population present a unidimensional view of this minority group. In the late 1970's the National Institute of Mental Health (Center for Minority Group Mental Health) funded the National Survey of Black Americans (NSBA), an omnibus social survey designed to assess the overall quality of black American life.

The NSBA data revealed that older unmarried blacks evidence particularly high levels of psychological distress; that economic and physical

health crises are particularly upsetting for low income blacks; and that males are more distressed than females by death problems, particularly the loss of a spouse or significant other (Jackson & Neighbors, 1982; Neighbors, 1983). Based on such results, specific black risk groups have been identified. This facilitates hypotheses about the various reasons different demographic variables are correlated with elevated levels of psychological distress. For example, the fact that income is inversely related to distress for economic problems only, suggests that the poorer one is the fewer economic resources that person has available to respond to an economic crisis. More affluent blacks, having the financial means to cope with economic difficulties, simply may not get as upset as their relatively disadvantaged counterparts. Although an intuitively obvious finding, it is not a trivial one. It is important because it provides a possible direction for interventions designed to improve the quality of life for low income black Americans. If it is reasonable to assume that economic problems are particularly distressing for low income blacks, then prevention efforts designed to decrease the prevalence of psychological distress among the black poor should attempt to reduce the incidence of economic crises in that group (Neighbors & LaVeist, in press).

The fact that the analyses of the NSBA showed that the never-married group shows elevated levels of distress at the later ages (unlike all of the other marital status groups) suggests that lacking the social support of a close confidant (spouse) makes them more vulnerable to stress. There may also be more stress associated with being older and having never been married. That is, because of the importance placed upon being married in this society, it may be the case that among people who share that value, distress is experienced because they have not been able to accomplish this goal. This may be especially true for the older people in the NSBA dataset because they were raised during a time when greater emphasis was placed upon the importance of marriage and family. Another possibility is that these never-married respondents have always evidenced high distress scores, even in their younger years. These elevated scores could have been indicative of some type of psychiatric disorder which made them less attractive as potential mates.

The NSBA results for gender, marital status and problem type paint a picture of men being unable to cope as well as women with the loss of a loved one, particularly a spouse (Neighbors, 1983). Specifically, it was found that overall, women evidenced higher levels of psychological distress than men, with two exceptions. First, when marital status was taken into account, widowed men were more distressed than widowed

women. Second, when problem type was taken into account, death problems were more upsetting for men than women. The notion that men are less able than women to cope with death problems is also supported by analyses on the utilization of mental health services. Neighbors and Jackson (1983) reported that the only type of problem for which men were more likely than women to seek the help of a private mental health therapist (psychiatrist or psychologist) was for death problems. We know that generally, death is a stressful event but for some reason, black men may be especially unable to adapt to the changes brought on by the loss of a spouse. If we can come to a better understanding of sex differences in coping with the loss of a loved one, then perhaps we can take steps to prevent some of the psychic pain black men feel when their wives or other loved ones are lost.

In summary, the risk factors mentioned above are for the most part individual characteristics. This means that many of the preventive interventions that we mount will be person-centered. We will be trying to "strengthen the host" by making African Americans better able to cope with the hardships we know they will face.

CONCLUSIONS

We need to become more focused in our epidemiologic research and analyses. That focusing process, while exploratory, should be guided by research findings such as the ones reported above. These analytic explorations also need to be guided by some theoretical notions about the pathogenesis of psychopathology. Within a social stress model of psychopathology, life events are assumed to play a causal role in the precipitation of distress. From a prevention standpoint, the stress paradigm fits very well with the nonspecific approach to psychiatric epidemiology that is necessitated by the use of symptom checklists to measure psychiatric morbidity. This approach assumes that different disease outcomes can result from the same stressors or accumulation of multiple stressors within a particular period of time (Dohrenwend & Dohrenwend, 1981).

Given the epidemiologic knowledge base we do have, preventive interventions with African Americans should proceed in the direction of lessening the impact and occurrence of social stressors empirically shown to be associated with undesirable outcomes in a specific portion of the black population. This can be done without being overly concerned with the prior specification of which specific diseases would be

prevented (Bloom, 1979). Before this can happen however, we need to know which particular demographic groups within the black community are at risk and what they are at risk for. Answers to such questions involve specific research strategies. One is the evaluation of instruments which seek to measure discrete disorders cross-culturally. Another is the need for research on large, representative black samples (Veroff et al., 1981, p. 431).

In summary, before the prevention of psychopathology can be achieved in black populations, we need to address a number of measurement and case-finding issues for the outcome variables we want to prevent. We need to develop better social theories of psychopathogenesis and test those theories in order to identify specific causal risk factors that can be manipulated. Given that we are only in the beginning stages of mental disorder prevention with African Americans, those who are seriously interested in pursuing the goals of prevention must decide where to go and formulate a sensible, realistic epidemiologic research strategy for getting there.

REFERENCES

- Anthony, J., Folstein, M., Romanoski, A., et al. (1985). Comparison of the lay Diagnostic Interview Schedule and a standardized psychiatric diagnosis. *Archives of General Psychiatry*, *42*, 667-675.
- Askenasy, A., Dohrenwend, B.P., Dohrenwend, B.S. (1977). Some effects of social class and ethnic group membership on judgments of the magnitude of stressful life events: A research note. *Journal of Health and Social Behavior*, *18*, 432-439.
- Bell, C. (1987). Preventive strategies for dealing with violence among blacks. *Community Mental Health Journal*, *23*, 217-228.
- Bloom, B. (1979). Prevention of mental disorders: Recent advances in theory and practice. *Community Mental Health Journal*, *15*, 179-191.
- Bloom, M. (1983). Prevention/promotion with minorities. *Journal of Primary Prevention*, *3*, 224-234.
- Brooks, C. (1974). New mental health perspectives in the Black community. *Social Casework*, *55*, 489-496.
- Brower, M. (1973). The emergence of community development corporations in urban neighborhoods. In B. Denner, R. Price (Eds.), *Community Mental Health: Social Action and Reaction* (pp. 59-75). New York: Reinhart & Winston.
- Brown, D., Gary, L. (1987). Stressful life events, social support networks and the physical and mental health of urban Black adults. *Journal of Human Stress*, *13*, 165-174.
- Buckner, J., Trickett, E., Corse, S. *Primary prevention in mental health: An annotated bibliography*. DHHS Pub. No. (ADM) 85-1405, 1985.
- Cannon, M., Locke, B. (1977). Being black is detrimental to one's mental health: Myth or reality? *Phylon*, *38*, 408-428.
- Carter, J. (1981). Treating black patients: The risks of ignoring critical social issues. *Hospital and Community Psychiatry*, *32*, 281-282.
- Catalano, R., Dooley, D. (1983). Health effects of economic instability: A test of economic stress hypothesis. *Journal of Health and Social Behavior*, *24*, 46-60.

- Dohrenwend, B.S. (1973). Social status and stressful life events. *Journal of Personality and Social Psychology*, 28, 225-235.
- Dohrenwend, B.S., Dohrenwend, B.P. (1970). Class and race as status-related sources of stress. In S. Levine and N. Scotch (Eds.), *Social stress*. Chicago: Aldine.
- Dooley, D., Catalano, R. (1980). Economic change as a cause of behavioral disorder. *Psychological Bulletin*, 87, 450-468.
- Dressler, W. (1985). Extended family relationships, social support and mental health in a Southern black community. *Journal of Health and Social Behavior*, 26, 39-48.
- Dressler, W. (1987). The stress process in a Southern black community: Implications for prevention research. *Human Organization*, 46, 211-220.
- Eaton, W., Kessler, L. (1981). Rates of symptoms of depression in a national sample. *American Journal of Epidemiology*, 114, 528-538.
- Fabrega, H. (1975). The position of psychiatry in the understanding of human disease. *Archives of General Psychiatry*, 32, 1500-1512.
- Health Resources Administration. *Health of the Disadvantaged*. DHHS Pub. No. (HRA) 80-633. Public Health Service. Washington, D.C. U.S. Government Printing Office, 1980.
- Hendricks, L., Bayton, J. et al. (1983). The NIMH's Diagnostic Interview Schedule: A test of its concurrent validity in a population of Black adults. *Journal of the National Medical Association*, 7, 667-671.
- Hilliard, T.O. (1981). Political and social action in the prevention of psychopathology of blacks: A mental health strategy for oppressed people. In J.M. Joffe, G.W. Albee (Eds.), *Primary prevention of psychopathology*, Volume 5. Hanover, N.H.: University Press of New England.
- Husaini, B. (1983). Mental health of rural blacks in west Tennessee. Final report of a study of health needs of rural blacks in Tennessee. USDA-SEA/CR Grant #801-15-13D Tennessee State University School of Agriculture and Home Economics.
- Husaini, B., Neff, J. (1980). Characteristics of life events and psychiatric impairment in rural communities. *Journal of Nervous and Mental Disease*, 168, 159-166.
- Jackson, J., Neighbors, H. (1982). Epidemiologic issues in assessing mental health status among black Americans. A symposium conducted at the Annual meeting of the American Psychiatric Association, Toronto, Canada.
- Kessler, R. (1979). Stress, social status and psychological distress. *Journal of Health and Social Behavior*, 20, 259-272.
- Kessler, R., Neighbors, H. (1986). A new perspective on the relationships among race, social class and psychological distress. *Journal of Health and Social Behavior*, 27, 107-115.
- Kessler, R. Cleary, P. (1980). Social class and psychological distress. *American Sociological Review*, 45, 463-478.
- Maypole, D., Anderson, R. (1987). Culture-specific substance abuse prevention for blacks. *Community Mental Health Journal*, 23, 135-139.
- Moritsugu, J., Sue, S. (1983). Minority status as a stressor. In Felner, R., Jason, L., Moritsugu, J. (Eds.), *Preventive Psychology*. Elmsford, N.Y.: Pergamon Press.
- Myers, H. (1982). Stress, ethnicity and social class: A model for research with black populations. In E. Jones, S. Korchin (Eds.), *Minority mental health*. New York: Praeger.
- Myers, J., Weissman, M., et al. (1984). Six-month prevalence of psychiatric disorders in three communities. *Archives of General Psychiatry*, 41, 959-967.
- Neff, J. (1984). Race differences in psychological distress: The effects of SES, urbanicity and measurement strategy. *American Journal of Community Psychology*, 12, 337-351.
- Neff, J. (1985). Race and vulnerability to stress: An examination of differential vulnerability. *Journal of Personality and Social Psychology*, 49, 481-491.
- Neighbors, H. (1983). Sociodemographic correlates of psychological distress in black Americans. Unpublished Research Paper, Program for Research on Black Americans, Institute for Social Research, Ann Arbor, Michigan.
- Neighbors, H. (1984). The distribution of psychiatric morbidity in black Americans: A review and suggestions for research. *Community Mental Health Journal*, 20, 169-181.
- Neighbors, H. (1986). Socioeconomic status and psychologic distress in black Americans. *American Journal of Epidemiology*, 124, 779-793.
- Neighbors, H., Jackson, J. (1983). Income, gender, problem type and the use of human service organizations among black Americans, Unpublished Research Paper, Program for Research on Black Americans, Institute for Social Research, Ann Arbor, Michigan.

- Neighbors, H., LaVeist, T. (in press). Socioeconomic status and psychological distress: The impact of material aid on economic problem severity. *Journal of Primary Prevention*.
- Neighbors, H., Jackson, J., Bowman, P., Gurin, G. (1983). Stress, coping and black mental health: Preliminary findings from a national study. *Prevention in Human Services, 2*, 4-29.
- Parker, S., Kleiner, R. (1966). *Mental illness in the urban Negro community*. New York: The Free Press.
- Paster, V. (1977). Organizing primary prevention programs for disadvantaged community groups. In D.C. Klein, S.E. Goldston (Eds.), *Primary Prevention: An idea whose time has come* (pp. 85-89). (DHEW Pub. No. (ADM) 77-447). Washington, DC: US Government Printing Office.
- Paul, B. (1981). Prevention: One community's approach. In J. Gordon (Ed.), *Reaching troubled youth*. (DHHS Pub. No. (ADM) 81-955). Washington, DC: US Government Printing Office.
- Pearlin, L., Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2-21.
- Robins, L., Helzer, J., et al. (1984). Lifetime prevalence of specific psychiatric disorders in three sites. *Archives of General Psychiatry, 41*, 949-958.
- Shure, M., Spivack, G. (1979). Interpersonal cognitive problem solving and primary prevention: Programming for preschool and kindergarten children. *Journal of Clinical Child Psychology, 8*, 89-94.
- Shure, M., Spivack, G. (1982). Interpersonal problem-solving in young children: A cognitive approach to prevention. *American Journal of Community Psychology, 10*, 341-356.
- Snowden, L. *Reaching the underserved*. Beverly Hills: Sage, 1982.
- Turner, J., Noh, S. (1983). Class and psychological vulnerability: The significance of social support and personal control. *Journal of Health and Social Behavior, 24*, 2-15.
- Ulbrich, P., Warheit, G., Zimmerman, R. (1989). Race, socioeconomic status and psychological distress: An examination of differential vulnerability. *Journal of Health and Social Behavior, 30*, 131-146.
- Veroff, J., Douvan, E., Kulka, R. (1981). *The inner American: A self-portrait from 1957-1976*. New York: Basic Books.
- Warheit, G., Holzer, C., Arey, S. (1975). Race and mental illness: An epidemiological update. *Journal of Health and Social Behavior, 16*, 243-356.
- Wheaton, B. (1980). The sociogenesis of psychological disorder: An attributional theory. *Journal of Health and Social Behavior, 21*, 100-124.
- Willner, M., Willner, F., Mooney, E. (1976). The forgotten children: An agency does double duty. *Child Welfare, 55*, 423-430.