

# Depression Among Southern Rural African American Women

## A Factor Analysis of the Beck Depression Inventory-II

Faye A. Gary ▾ Hossein N. Yarandi

- ▶ **Background:** This is the first reported study involving a factor analysis of the Beck Depression Inventory-II, which was administered to a sample of southern rural African American women.
- ▶ **Objective:** To determine the factor structure of the Beck Depression Inventory-II using data collected from southern rural African American women.
- ▶ **Methods:** Using a correlational, descriptive design, 206 southern rural African American women were invited to participate in a face-to-face interview that occurred in a variety of community-based settings.
- ▶ **Results:** The factor analysis of the Beck Depression Inventory-II resulted in a two-factor solution. Symptoms such as pessimism and worthlessness loaded high on the first factor (cognitive). The second factor explained somatic-affective symptoms of depression, with factor loadings high on tiredness and fatigue and loss of energy.
- ▶ **Conclusions:** The application of the Beck Depression Inventory-II among African American people would generate needed information about how depressive symptoms may be expressed among them. Knowledge gained from this study promises to be useful for developing appropriate research studies and population-specific treatment approaches for this group of women.
- ▶ **Key Words:** African American women · Beck Depression Inventory-II

Depression manifests as a disturbance in mood, with common symptoms such as persistent sadness or despair, insomnia, decreased appetite, anhedonia, hopelessness, irritability, low self-esteem, and suicidal ideation (American Psychiatric Association [APA], 1996, 2000). It is the most pervasive psychiatric problem observed in primary care settings throughout the world (Ender, Macrodimitris, & Kocovski, 2000). In the United States, the lifetime prevalence of major depression is estimated to

be 10% to 25% for women and 5% to 12% for men, with a point prevalence of approximately 5% to 10% for women and 3% to 6% for men. The estimated economic burden of depression from treatment costs, mortality, and lost productivity exceeds \$43 billion a year (Pinus, 2001; Scanlon, 2002).

It is important to distinguish between depressive symptoms and depression itself. Depressive symptoms can be detected by psychometric instruments such as the Beck Depression Inventory-II (BDI-II) (Beck, Steer, & Brown, 1996). Clinical depression, however, implies a formal psychiatric diagnosis based on a systematic comparison of the individual's mental health history and his or her signs and symptoms with predetermined criteria (APA, 1996, 2000).

African American women reportedly manifest more depressive symptoms than their White counterparts, but these differences dissipate when socioeconomic status is considered (Beck et al., 1996; Kessler et al., 1994; Kessler et al., 2003). However, African American women are at higher risk for depression, primarily because of their overrepresentation in the nation's lower socioeconomic group (Kessler et al., 2003; Tomes, Brown, Semanya, & Simpson, 1990), their chronic medical problems (Jackson-Triche et al., 2003), their limited access to health and mental health services (Gamble, 1997; Gary, Yarandi, & Rivers, 2001; Oppenheimer & Shultz, 1999; Snowden, 2001), and the stigma of mental illness embedded in some African American communities (Schreiber, Stern, & Wilson, 1998, 2000; Snowden, 2001). Depression interferes with an individual's essential functional abilities, thwarts productivity, and can increase the risk for other severe health problems (LaVeist, Bowie, & Cooley-Quille, 2000; Marmer, 2003; Olfson et

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*Faye A. Gary, EdD, MS, RN, FAAN, is Medical Mutual of Ohio Professor of Nursing for Vulnerable and At-Risk Persons, Frances Payne Bolton School of Nursing, Case Western Reserve University, Cleveland, Ohio.*

*Hossein N. Yarandi, PhD, is Associate Professor, College of Nursing and Biostatistics Unit, University of Florida, Gainesville.*

al., 2002). There has been insufficient investigation of treatment outcomes for depression in this population (Broman, Hamilton, Hoffman, & Mavaddat, 1995; Brown & Schulberg, 1995; Brown, Schulberg, & Prigerson, 2000).

The Beck Depression Inventory (BDI), published in 1961, is a self-report instrument used to measure depression in terms of three dimensions: cognition, somatization, and motivation (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). It was designed originally to assess treatment-produced change. Over the years, it has been used to categorize people into nondepressed and depressed groups, with the depression ranging through minimal, mild, moderate, and severe (Beck et al., 1996; Yonkers & Samson, 2000).

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An examination of the BDI-II shows that four items (weight loss, body image change, somatic preoccupation, and difficulty with work) have been deleted, and four new items (agitation, worthlessness, difficulty with concentration, and energy loss) have been added. Two items, sleep and appetite, have been reworded such that the respondent can indicate the occurrence of an increase or decrease in symptom severity. This 21-item measure can be self-administered to adolescents and the elderly. Its completion requires about 5 to 10 minutes, and it is recommended by primary and mental health specialty providers (Beck et al., 1996).

## Literature Review

### The Beck Depression Inventory

As an aid in the diagnostic process, a variety of screening instruments can be administered, such as the Center for Epidemiologic Studies Depression (CES-D) Scale (Brown, 1990; Brown, Ahmed, Gary, & Milburn, 1995; Radloff, 1977), the Hamilton Depression Scale (Hamilton, 1960), and the BDI (Beck et al., 1961, 1996). The BDI, a 21-item self-reported measure, has been one of the most widely used screening instruments for detecting symptoms of depression. It can be administered to assess normal adults, adolescents, and individuals with psychiatric disorders (Beck et al., 1996). The BDI was designed to document a variety of depressive symptoms the individual has experienced over the preceding week.

Large amounts of statistical data obtained from the original version of the BDI attest to the instrument's reliability and validity for the assessment of depressive symptoms (Beck, Steer, & Garbin, 1988). Large data sets have accumulated from its administration to individuals with and without psychiatric histories (Beck et al., 1988; Beck et al., 1996; Buckley, Parker, & Heggie, 2001). Studies have shown the factor structure of the measure. The most common structure is a three-factor configuration containing negative attitudes toward the self, somatic features, and functional impairment (Beck et al., 1988; Buckley et al., 2001; Endler et al., 2000).

### Beck Depression Inventory-II

The BDI-II, published in 1996, is a revised version of the original BDI designed to represent the criteria for depression, as stated in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) (APA, 1996). The BDI-II presents the individual with 21 items, each having four statements intended to reflect increasing severity of a particular symptom. Its queries investigate depressive symptoms experienced over the preceding 2 weeks. Its psychometric properties are less documented than those are of the BDI because of its more recent development and use (Beck et al., 1988; Beck et al., 1996; Endler et al., 2000).

### Factor Structure of the BDI-II

The factor structure of the BDI-II has not been studied adequately with ethnic populations such as African Americans, and there are insufficient data to support its sensitivity and specificity for these populations (Beck et al., 1988; Beck & Beck, 1989; Beck et al., 1996; Steer, Ball, & Ranieri, 1999). Therefore, little empirical data about African Americans and the BDI-II are available in the research literature. Data are lacking for African American individuals who have experienced one or more episodes of various types of mood disorders (Beck, 1988; Beck et al., 1996) and for their performance with the BDI-II.

From 1948 to 2000, Beck and colleagues published more than 400 articles about mental health and illness (Beck Institute, 2002). From these 400 articles, one published paper in 1977 addressed the factor structure of depression among African American alcoholic men (Steer, Shaw, Beck, & Fine, 1977). No other published studies about African American people and the factor structure of the BDI or the BDI-II were identified among these researchers' expansive repertoire. Such gaps in the research and clinical literature could forestall culturally competent and relevant mental health research and clinical care for southern rural African American women (Gamble, 1997; Jackson-Triche et al., 2003; Williams, 1986).

### BDI-II Psychometric Properties

The BDI-II has other strong psychometric properties. When the BDI-II was administered to individuals with psychiatric diagnoses and to other populations such as college students, the results yielded high internal consistency coefficients ( $\alpha = 0.92$  and  $0.93$ ) with test-retest reliability of ( $r = 0.93$ ). Beck et al. (1996) studied a sample of 500 patients with psychiatric diagnoses. Their sample consisted of 317 (63%) women and 183 (37%) men. The reported ethnic makeup of the sample included Whites ( $n = 454$ , 91%), African Americans ( $n = 21$ , 4%), Asian Americans ( $n = 18$ , 4%), and Hispanics ( $n = 7$ , 1%). There was no mention of American Indian/Alaska Natives in their sample. Good convergent and discriminant validity was evidenced when it was correlated with other standardized measures. The factor structure of the

BDI-II showed two components: cognitive symptoms and somatic-affective symptoms.

The BDI-II also was administered to a sample of 120 college students as a comparative group of normal participants. This sample who took the BDI-II, all of whom were enrolled in an introductory psychology course at a university in Fredericton, Canada, "was predominantly White," (BDI-II Manual, 1996, p. 14). The students finished the BDI-II in a typical classroom setting. The sample included 67 (57%) women and 53 (44%) men with a mean age of 19.58 years. The coefficient alpha for the college students was .93.

According to researchers, African Americans have comprised about 1% to 10% of the sample in preliminary BDI-II studies (Buckley et al., 2001). No studies were found that elucidated the factor structure of the BDI-II for the African American women used in the validity and reliability construction of this instrument (Beck Institute, 2002). How the BDI-II will perform with African American populations, including their numerous cultural groups, is not reported. The purpose of this study was to determine the factor structure of the BDI-II administered to a sample of southern rural African American women, none of whom self-reported receiving mental healthcare during the preceding year and at the time of data collection.

## Methods

### Sample

The data reported in this study are part of a larger inquiry concerning African American women's knowledge and beliefs related to health and well-being concerns (Gary et al., 2001). The institutional review board at the university approved the study. All the women approached by the researchers about the possibility of participating in the study agreed to complete the face-to-face interview and signed a written informed consent form. The sample consisted of 206 African American women, all of whom had been residents in their rural communities for a minimum of 5 years. The women lived within a 50-mile radius of a large university in north central Florida.

### Procedures

The principal investigator trained volunteer professional registered nurses who were members of the local affiliate of the National Black Nurses Association, two volunteer graduate students, and one paid project staff member. The researchers placed flyers about the study in churches, convenience stores, beauty salons, schools, neighborhood centers, and shopping malls. The principal investigator also made appointments with ministers of churches within the 50-mile radius to request time to make announcements at their morning services and explain this research to the congregation. If the ministers and church leaders supported the research, subsequent dates were established for data collection at a particular church, which typically occurred at the end of the Sunday morning service.

The researchers also made contact with other community brokers. They attained permission from business owners and appropriate community leaders before the flyers were distributed or contact was made with the women.

Women present in beauty salons, neighborhood centers, public schools, and the like at the time the researchers visited could schedule interview appointments with the researchers. Other appointments were made by telephone and during face-to-face contacts in other settings such as grocery stores and employment sites. Data collection took place at community libraries, neighborhood centers, and the principal investigator's office at the university. At the end of the interview, each woman was given \$20 as a token of the researchers' appreciation.

All the items on the data collection instruments were read aloud to the women, who were invited to follow along with the researchers as they read each item. This process was chosen to remove any apprehension that the women might have had about not being able to read or understand the items that appeared on the instruments, to diminish the need for inquiry about their reading levels or any assessment inventory regarding their reading or comprehension capacities, to ensure that the data would be accurately recorded, and to engage the women in the research process. At the end of the interview, the women were given health-related information about hypertension, diabetes, heart disease, depression, and anxiety.

### Measures

In this study, two research instruments were used. The first instrument, the Patient Satisfaction With Health Care Decisions, was adapted to collect data on the sociodemographics, health status, and other related domains pertinent to the study. The alpha coefficient of this measure ranged from 0.82 to 0.91 (Holmes-Rover et al., 1996; Rothert et al., 1997; Rothert, 1996; Pedhazur & Schmelkin, 1991).

The second instrument was the BDI-II. This measure has 21 items, each consisting of four self-evaluative statements describing symptom severity. These statements are coded along an ordinal continuum ranging from absent or mild (scored as 0) to severe (scored as 3). The scores from the 21 items are summed to yield a total value (range, 0-63). According to the BDI-II Manual (Beck et al., 1996), depression scores are interpreted as 0 to 13 (minimal), 10 to 16 (mild), 17 to 29 (moderate), and 30 to 63 (severe). The BDI-II usually is self-administered, uses simple language, and is easy to score. Item responses are based on verbal descriptions by respondents about their current mental state. The items do not reflect a particular theory of depression.

## Results

The Statistical Analyses Systems (SAS, version 8.2) was used to analyze the data for this study. The mean age of the sample was  $54 \pm 14.1$  years. Almost half of the participants (49.5%) were married, and most (74.8%) were employed full-time (Table 1). The median household income was \$26,130, which is notably lower than \$42,148, the inflation-adjusted median household income in the United States (National Center for Health Statistics, 2002). About 48% of the women had an education that exceeded the high school level. The majority (80.5%) was Protestant. Approximately 61% of the women classified

TABLE 1. Sample Characteristics of African American Women (N = 206)

Variable	n	%
Marital status		
Married	102	49.5
Divorced	42	20.4
Single (never married)	36	17.5
Widowed	14	6.8
Separated	12	5.8
Employment status		
Employed full-time	154	74.8
Employed part-time	7	3.4
Not employed	22	10.7
No response	23	11.2
Total household annual income (US dollars)		
No response	3	1.4
Under \$15,000	24	11.7
\$15,000–\$24,999	69	33.5
\$25,000–\$34,999	41	19.9
\$35,000–\$49,999	26	12.6
\$50,000–\$99,999	22	10.7
\$100,000 and above	21	10.2
Education		
Less than high school graduation	29	14.1
High school graduate (includes G.E.D.)	78	37.9
Greater than high school, but no degree	37	18.0
Technical trade/community college degree	29	14.1
Bachelor's degree	24	11.7
Graduate MS/PhD degree	8	3.9
No response	1	0.5
Religious preference/affiliation		
Protestant	166	80.5
Catholic	1	0.5
Jewish	3	1.5
None	3	1.5
No response	33	16.0
Ethnic/cultural background		
Black (born in USA)	203	98.5
Caribbean Islander (not born in USA)	1	0.5
African (not born in USA)	1	0.5
Other	1	0.5
Source of payment for prescribed medicines		
Completely out-of-pocket payment	23	11.2
Partly out-of-pocket payment	161	78.2
Complete payment by the third party	16	7.8
Don't know	6	2.8
Health condition		
Poor	5	2.4
Fair	53	25.7
Good	126	61.2
Excellent	22	10.7

their health as "good," and the majority (78.2%) stated that they had some type of health insurance, primarily through their employment. All the women denied any history of psychiatric illness.

The mean total score for the BDI-II ( $n = 206$ ) was  $8.71 \pm 7.78$  ( $r = 0-49$ ). According to the cutoff scores and interpretive labels (Beck et al., 1996), 167 women (81.1%) scored in the minimal range (0-13), 21 (10.2%) in the mild range (14-19), 13 (6.3%) in the moderate range (20-28), and 5 (2.4%) in the severe range (29-63) (Table 2).

The coefficient alpha of the BDI-II for the sample was 0.91, suggesting that the BDI-II exhibited a high level of internal consistency for the study sample. All the corrected item-total correlations for the 21 BDI-II items were significant after a Bonferroni adjustment ( $\alpha/21$ ) was used to control for the experiment-wise (overall) error rate. The correlation coefficients ranged from 0.34 (loss of interest in sex) to 0.63 (sadness). Kaiser's measure of sampling adequacy for the partial correlation matrix of the 21 items was 0.92, a value that Kaiser considered extremely high and desirable (Kaiser, 1974). For comparative purposes, this study used the same type of factor analytic approach that Beck et al. (1996) used when they analyzed the scores generated by an adult population of psychiatric outpatients and a sample of predominantly White Canadian college students.

An iterated principal-factor analysis was performed, in which squared multiple correlations were used for the initial communality estimates, and a Promax (oblique) rotation was used to identify the self-reported dimensions of depression. The minimum 80% variance criterion and the scree plot were used to determine the optimal number of factors (Hair, Totham, Anderson, & Black, 1998). Concerning the adequacy of the sample size for performing factor analysis, the most conservative estimate of sample size indicates the necessity for about 10 times as many observations as there are variables to be analyzed (Hair et al., 1998, Hatcher, 1994). The sample size ( $n = 206$ ) for this study very nearly met this rule.

Two factors were extracted. An alpha factor analysis was conducted to confirm what number of factors to extract, and the estimated coefficient alphas for the factors suggested that the first two common factors were potentially reliable for this sample. The coefficient alphas for the two factors were 0.98 and 0.83, respectively. The two extracted factors explained 89% of the common variance. Two comparably sized eigenvalues of 5.35 and 5.53 were found for the reduced correlation matrix, and the correlation between the two oblique factors was 0.57 ( $p < .001$ ).

The pattern matrix of the standardized regression coefficients loading on the two Promax-rotated maximum-likelihood factors is presented in Table 3. Symptoms such as pessimism, worthlessness, punishment feelings, sadness,

**TABLE 2. Means, Standard Deviation, and Corrected Item-Total Correlations (Cronbach Alpha = 0.90)**

Variable	Mean	SD	Corr
Sadness	0.21	0.46	0.63
Pessimism	0.12	0.39	0.47
Past failure	0.25	0.57	0.44
Loss of pleasure	0.33	0.59	0.61
Guilty feelings	0.33	0.50	0.53
Punishment feelings	0.19	0.56	0.57
Self-dislike	0.17	0.54	0.51
Self-criticalness	0.30	0.63	0.52
Suicidal thoughts or wishes	0.05	0.28	0.40
Crying	0.38	0.89	0.52
Agitation	0.43	0.85	0.52
Loss of interest	0.26	0.57	0.58
Indecisiveness	0.24	0.58	0.54
Worthlessness	0.11	0.40	0.51
Loss of energy	0.62	0.58	0.47
Changes in sleeping pattern	0.84	0.95	0.58
Irritability	0.31	0.62	0.59
Changes in appetite	0.64	0.82	0.45
Concentration difficulty	0.54	0.75	0.60
Tiredness or fatigue	0.74	0.81	0.61
Loss of interest in sex	0.64	0.87	0.34

self-dislike, loss of interest, indecisiveness, and past failure tended to load high on the first factor. All these symptoms were psychological and cognitive in nature. Therefore, Factor I was a cognitive dimension of self-reported depression. Factor II explained somatic symptoms such as tiredness or fatigue, loss of energy, concentration difficulty, irritability, changes in appetite, changes in sleeping pattern, loss of interest in sex, and loss of pleasure. Such factors were thought to represent a "somatic-affective" dimension of self-reported depression.

## Discussion

The results for this study demonstrate the presence of cognitive and somatic-affective dimensions. The variables that have significant loading on the cognitive factor (Factor I in Table 3) are pessimism, worthlessness, punishment feelings, sadness, self-dislike, loss of interest, indecisiveness, past failure, and guilty feelings. Also within this dimension are affective-somatic factors: sadness, self-dislike, indecisiveness, and loss of interest.

In factor analysis terminology, a variable with the highest factor loading can be viewed as a surrogate representative for a particular factor dimension (Hair et al., 1998). Pessimism and worthlessness are presented as cognitive surrogate variables, with loadings of 0.81 and 0.73, respec-

tively (Table 3), indicating self criticism, devalued self-significance, and internalized thoughts that constitute a negative self-view, suggesting an apathetic outlook of the future. Some affective symptoms such as loss of interest, indecisiveness, and sadness also are present in Factor I. The authors propose to name this factor "critical self-appraisal" because of the heavy loadings on pessimism and worthlessness.

Factor II, somatic-affective symptoms, includes tiredness or fatigue, loss of energy, concentration difficulty, irritability, changes in appetite, changes in sleeping pattern, loss of interest in sex, indecisiveness, and loss of pleasure. The surrogate variables in Factor II are tiredness and loss of energy, with loadings of 0.76 and 0.63, respectively. These are common symptoms of depression (APA, 1996, 2000). On the basis of the variables that loaded significantly on Factor II, the authors have labeled this factor as "deregulation of arousal," indicating physiologic changes that can occur in individuals with depressive psychiatric symptoms. Some manifestations of depression, also known as vegetative indicators, typically result from dysregulation of the control for the neuroendocrine and autonomic systems by the hypothalamus. Documented physiologic changes include sleep disturbances, diminished libido (sexual desire), appetite changes, weight loss or gain, cardiac irregularities, and other warning signs similar to these variables loaded on Factor II (APA, 2000; Iverson, Stampfer, & Gaetz, 2002).

**TABLE 3. Factor Matrix for a Sample of (N = 206) African American Women**

Symptom	Factor I	Factor II
Pessimism	0.81	-0.22
Worthlessness	0.73	-0.10
Punishment feelings	0.65	0.03
Sadness	0.45	0.19
Self-dislike	0.44	0.15
Loss of interest	0.44	0.25
Indecisiveness	0.43	0.22
Past failure	0.40	0.12
Guilty feelings	0.35	0.28
Self-criticalness	0.34	0.28
Suicidal thoughts or wishes	0.28	0.17
Tiredness or fatigue	-0.03	0.76
Loss of energy	-0.06	0.63
Concentration difficulty	0.12	0.58
Irritability	0.15	0.55
Changes in appetite	-0.01	0.54
Changes in sleeping pattern	0.16	0.51
Loss of interest in sex	-0.07	0.48
Loss of pleasure	0.21	0.42
Crying	0.27	0.34
Agitation	0.28	0.34

When a satisfactory factor solution has been derived, researchers usually attempt to assign names to the factors. Although the process of naming factors is not very scientific, a logical assigned name can represent the underlying nature of the factors and facilitate the presentation and understanding of the factor solution.

The two extracted factors in this study clearly discriminate between the cognitive and somatic-affective symptoms. However, the two proposed names of "critical self-appraisal" for Factor I and "deregulation of arousal" for Factor II give more meanings to the factor structures in this study.

This community-based study did not include documentation for the presence or absence of a diagnosis of major depression or any other type of mental or physical health problem. Therefore, it cannot be acknowledged that the BDI-II has the essential sensitivity, specificity, and positive predictive power to detect the individuals who are at risk for or currently experiencing depression. Moreover, health-related disabilities and their overlap with role functions because of depressive symptoms were not determined. The sampling was not designed to produce a representative sample of African American women.

Community-based inquiries can help to determine whether symptoms of depression are present in particular populations not affiliated with a clinic group (Brown et al., 1995; Roy-Bryne et al., 2000). In a study conducted by Brown et al. (1995) with a sample of 865 African American urban adults, the researchers found an association between major depression and young age, the experience of numerous stressful life events in the preceding year, and the presence of fair or poor health as major predictors of depression. They concluded that few African Americans actually receive treatment for major depression. The findings in the Brown study are similar to those from the current study in that none of the women self-reported treatment received for depression in the preceding year.

The factor structure obtained for this study was compared with that of two samples Beck et al. (1996) used for constructing the psychometric properties for the BDI-II. The first sample, involving four different psychiatric outpatients' clinics consisting of 183 men (37%) and 317 women (63%) from New Jersey and Pennsylvania (urban) and Kentucky (rural), produced the two factor structures. The first five variables with the highest loadings on Factor I (somatic-affective) were tiredness (0.84), loss of energy (0.71), loss of interest (0.60), loss of pleasure (0.57), and change in appetite (0.57). For Factor II (cognition), the five highest loadings were on past failure (0.81), worthlessness (0.73), guilty feelings (0.66), self-dislike and self-criticalness (0.63), and punishment feelings (0.55).

The second study sample involving Canadian college students (67 females [57%] and 53 males [44%]) enrolled in an introductory course at a university in Fredericton, Canada, was used to determine the psychometric properties produced with a nonclinical group. Among these college students, the five highest factor loadings for Factor I (cognition) were worthlessness (0.86), sadness (0.72), indecisiveness (0.65), crying (0.60), and self-dislike (0.58). For Factor II, the five highest loadings were loss of energy (0.90), tiredness or fatigue (0.82), change in appetite

(0.54), concentration difficulty (0.44), and changes in sleeping pattern (0.43).

By comparison, the African American women had factor loadings more reflective of the Canadian college students than the outpatient psychiatric group, although there were overlaps among the three samples. Specifically, the factor loadings for the African American women and the Canadian college students had some similarities. Factor I (cognition) included worthlessness, sadness, self-dislike, indecisiveness, and sadness, which were evident in both groups. Factor II (affective-somatic) also produced some similarities such as tiredness or fatigue, loss of energy, change in appetite, and changes in sleeping pattern.

These comparisons suggest commonalities among the three populations, showing that the African American women and the Canadian college students shared several markers for depression. Such findings could suggest that the BDI-II is useful as a first-line screening instrument among populations. Caution, however, is desirable because of the limited scientific data about how depression is manifested among African Americans. Over the years, African Americans have been incorrectly diagnosed. They are more likely to be given a diagnosis of schizophrenia and less likely to receive a diagnosis of depression or some other type of affective disorder (Mental Health Report, 2001; Smedley, Stith, & Nelson, 2003).

Among African American women, depression could be undetected because a depressed mood is not as blatant as other signs of the disorder that might be more manifest in the cognitive dimension (Brown, Abe-Kim, & Barrio, 2003; Brown & Schulberg, 1995, 1998). However, on the basis of the variables included in Factor II, symptoms such as tiredness or fatigue, loss of energy, or concentration difficulty could be important clues of depression. Healthcare providers should query women about depression when they report these and other related somatic symptoms.

Other epidemiologic studies have corroborated the findings of Brown et al. (1995), who posited that the major risk factors for depression among African Americans are fair or poor health and young age (20–29 years), but not other cultural and familial variables. Kessler et al. (2003), using national representative data on the prevalence and correlates of major depressive disorder, as determined by DSM-IV criteria, reported that depression is a common disorder in the general population, is accompanied with severe role impairment, and is present in individuals with other physical conditions (Roy & Roy, 2001). In another study, the prevalence of major depression was estimated to be 4.9%. The findings showed a relatively higher prevalence of major depression among females, young adults, and individuals with less than a college education (Blazer, Kessler, McGonagle, & Swartz, 1994), but indicated that the problem declined monotonically with higher incomes and education (Kessler et al., 1994).

Despite the prevalence and debilitating potential of major depression, inadequate treatment is considered a serious problem. Screening and early detection along with improved quality of treatment should be emphasized (Kessler et al., 1994). The African American women in this study would be considered at risk because of their lower income and education, the unlikely possibility of receiving

mental health specialty care, and their residence in rural communities where the financial burdens can create extreme adversity (Blazer et al., 1994; Kessler et al., 1994; Kessler et al., 2003; Snowden, 2001).

The predominance of affective-somatic symptoms and self-reported physical impairment among African Americans as expressions of depression deserves careful culturally sensitive explorations. Health professionals in primary care settings could experience difficulty unraveling the nuances of depression because they are imbedded in a myriad of somatic symptoms, as compared with a disorder that manifests a variety of both cognitive and affective-somatic symptoms (Brown, Schulberg, Sacco, Perel, & Houck 1999; Neighbors, Jackson, Broman, & Thompson, 1996; Brown, Schulberg, & Shear, 1996; Coyne, 1995). Studies that aim to provide more lucid explanations and guidelines for screening and diagnosing depression in African American women should be implemented.

Studies about the lower rates of depression and the experiences of depression among African American women need to be explored systematically because the profile of African American women shows numerous risk factors for depression including poor or fair health, fewer financial resources, limited access to healthcare, stigma about mental healthcare, and less desirable treatment outcomes (Gary et al., 2001; Jha et al., 2003; Lawson, Rodgers-Rose, & Rajaram, 1999; Smedley et al., 2003; Murphy, 2003.) Their resiliency, manifested over time, also should be better understood and strengthened.

In conclusion, for more accurate and refined detection of depression among African American women, checklists of ethnic-specific signs and symptoms, ideally generated by African American women, should be developed and integrated into research measures and methods that involve them (Zhang & Snowden, 1999). ▀

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Corresponding author: Faye A. Gary, EdD, MS, RN, FAAN, Frances Payne Bolton School of Nursing, Case Western Reserve University, 10900 Euclid Avenue, Cleveland, OH 44106-4904 (e-mail: fgary@case.edu).

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