

# Racial and ethnic differences in depression: current perspectives

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**Abstract:** Major depressive disorder (MDD) is among the most prevalent disorders in the US that often goes underdiagnosed and untreated. The burden of disability among those untreated is heaviest among untreated minority populations. Recent studies show that among African Americans, those with socioeconomic stress are less likely to report psychological symptoms or remain compliant with initiated treatment. While minority populations are less likely to suffer from acute episodes of MDD than Caucasians, they are more likely to suffer from prolonged, chronic, and severely debilitating depression with heavy consequences on their level of daily functioning. Part of the problem of underdiagnoses lies with the provider. Many providers today are unable to notice subtleties in presentation or recognize uncommon presentation of disease. This paper focuses on discrepancies in the presentation of depression among minorities when compared to Caucasians as well as factors that serve as boundaries for successful treatment.

**Keywords:** minorities, depression, African American, chronic, disparities, ethnic

## Introduction

Depression is a disease that straddles all genders, ethnicities, races, and walks of life. Studies have shown that of the roughly 18 million Americans who struggle with mood disorders, approximately ten million of these individuals suffer from major or clinical depression. Of these ten million individuals, roughly two-thirds go without treatment. The disease is multifactorial and can be attributed to genetic causes, various psychosocial and environmental stressors, and can be an unpleasant accompaniment to a variety of other diseases and disease processes. The pathogenesis of disease has previously been described as involving three general sets of risk factors: 1) internalizing factors such as genetics, 2) externalizing factors such as medication side effects/secondary to underlying illnesses and substance abuse, and 3) adversity due to trauma and psychosocial stressors such as low socioeconomic position. Those with first-degree relatives with the disorder are at a 1.5 to 3-time increase in risk than those among the general population. When exploring disparities in depression across racial and ethnic boundaries, it is important to consider 1) the differences in predisposing factors (ie, genetic factors and adverse childhood events), 2) the presentation of disease, and 3) boundaries to sustained and successful treatment. For the purposes of this article, we will explore discrepancies in the presentation of depression among minorities when compared to Caucasians as well as factors that serve as boundaries for ethnic minority patients in initiating treatment and sustaining a long-term, disease-free existence.

Studies that have explored the prevalence and distribution of major depressive disorder in African Americans, non-Hispanic Caucasians Americans and Caribbean African Americans have found that overall lifetime prevalence of major depressive

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disorder among Caucasians was 17.9% as opposed to African Americans, whose prevalence estimate was only 10.4%.<sup>1</sup> The difference between African Americans and Caucasians lies in the fact that the chronicity of disease was higher for African Americans (56%) than it was for Caucasian patients (38.6%).<sup>1</sup> Among this percentage, fewer than half of these African Americans sought treatment for their depression, although when asked to qualify their disease, they would rate their condition as severe or disabling.<sup>1</sup> Thus, this study concluded that the burden of depression was shouldered more heavily on African Americans than it was on Caucasians in the United States, leading to an overall greater degree of functional impairment. Some studies argue that African Americans may have lower rates of depression when compared to non-Hispanic Caucasians due to the resilient nature of the community and greater religious support, but even these studies agree that these patients often tend to be underdiagnosed or misdiagnosed.<sup>2</sup> These studies also acknowledge that African Americans who are diagnosed with depression often tend to have more serious, chronic, and severely debilitating disease.<sup>2</sup>

When examining risk factors for depression in African Americans, studies have focused on the role of discrimination as a major potential risk factor for MDD in the African American community. Self-perceived racial discrimination, in particular, has been strongly associated with worsening mental and physical health, more so in African American women than in men.<sup>3</sup> By contrast, a strong sense of ethnic identity among African Americans has been shown to be a protective factor against mental illness in these communities.<sup>4</sup> Ethnic identity is defined as a sense of commitment and belonging to an ethnic group, positive feelings about the group, and behaviors that indicate involvement with the ethnic group.<sup>4</sup> There are future studies aimed at examining cultural and ethnic identity among clinical samples in an attempt to gain a better sense of how positive ethnic identity can be fostered and strengthened among members of the community in an attempt to protect against mental illness.<sup>4</sup> In addition to ethnicity and gender, risk factors such as lower yearly income, socioeconomic positioning, poverty status, and employment are recognized as key risk factors.<sup>3</sup> This suggests that marriage and a higher level of income and education are protective factors in the African American community for depression. Job security, for example, was found to be associated with fewer depressive symptoms in African American men than in Caucasians or Hispanic communities.<sup>3</sup>

When discussing disparities in depression among ethnic minorities, one should consider the relationship between

socioeconomic position and depression. Studies have examined the relationship between socioeconomic position and depression in the African American community. One study in particular found that household income and unemployment predicted greater odds of major depressive episodes among African Americans and an inverse relationship between education level and a 12-month major depressive episode. Additionally, an inverse relationship between income and 12-month major depressive episode (MDE) was noted in African American, particularly in women.<sup>5</sup> In addition to socioeconomic factors, home environment was also assessed for risk of depression in African Americans. Thus far, no concrete data has shown that African Americans in single-parent households are more susceptible to depression later in life than those in two-parent families.<sup>3</sup> However, evidence from these studies has shown that higher parental education correlated to greater adult achievement and self-esteem in African Americans, especially in African American men, and lower depression.<sup>3</sup> Another study looked at how neighborhood ethnic composition related to mental health among African Americans. Results suggested that as same-ethnicity neighborhood composition increased, rates of depression decreased.<sup>3</sup> The study used the Center for Epidemiologic Studies-Depression instrument to show that neighborhood ethnic composition was a prominent risk factor among African Americans for depression (24%) when compared to Caucasians (14%).<sup>3</sup>

There is a known association between stressful life events (SLEs) and depression. SLE can be seen in racial minorities from lower socioeconomic backgrounds, whose lives are compounded by abject or perceived racism, a dearth of education, communal violence, single-family households, or substance abuse. One cross-sectional study examined how SLEs are determined by race and gender in a sample of 5,899 adults.<sup>6</sup> Of these 5,899 adults, 5,008 were African American or Caribbean Blacks. Non-Hispanic Caucasians made up the remainder of the sample. SLE in the past 30 days was the independent variable. Twelve-month MDE was used as the dependent variable, with factors such as age, educational level, marital status, employment, and region as controls.<sup>6</sup> The results of the study suggested a stronger association between SLE and MDE among Caucasian men compared to African American or Caribbean black men. However, there was no statistically significant difference between Caucasian and African American women.<sup>6</sup> While this study demonstrated a possible stronger association between SLE and MDE in Caucasian men, the sample size of 891 Caucasians to 5008 African Americans or Caribbean individuals cannot be ignored. Although control factors such as educational level, marital

status etc. were addressed, a larger sample size of Caucasian patients may have afforded researchers reliable results.

Researchers have examined lower socioeconomic status as a risk factor for MDD among racial and ethnic minorities. One study examined the prevalence of MDD in 1,117 black adolescents, 810 African Americans, and 360 Caribbean blacks, with high household income as the main predictor and MDD as the main outcome.<sup>7</sup> These results showed that higher household income was a protective factor against MDD for Caribbean blacks and for females than for African Americans males.<sup>7</sup> African American males were at higher odds of developing lifetime, 12-month, and 30-day MDD.<sup>7</sup> This study demonstrates how SES fails to protect African Americans when it comes to chronic, debilitating MDD.

Further disparities between minority populations and Caucasians were found in studies examining the association between MDD symptoms and the presence of other comorbid chronic medical conditions.<sup>8</sup> The researchers in this study found weaker associations between MDD and chronic medical conditions for African Americans when compared to Caucasians.<sup>8</sup> The data for this study came from the Americans' Changing Lives Study, which followed patients from 1986 to 2011. The results were based on self-reporting physician diagnoses at the start of the study and a follow-up 25 years later.<sup>8</sup> Based on the respondents' answers, chronic conditions such as hypertension, diabetes, chronic lung disease, chronic heart disease, etc. were tabulated. Researchers used a 10-item Center for Epidemiological Studies-Depression (CES-D) scale followed by multi-group structural equation modeling to assess associations between subsequent MDD symptoms and chronic medical conditions among Caucasian and African American patients.

Certain studies have examined the role of various socioeconomic factors like education in the predictive role on depressive symptoms.<sup>9</sup> This prospective study utilized a life-course approach to compare African American and Caucasian males and females to assess the impact of >12 years continued education on future depressive symptoms from baseline to up to 25 years.<sup>9</sup> African American males were the only group not to exhibit a net protective effect of education on the development of chronic medical conditions, including depression.<sup>9</sup> While education was protective to an extent, a threshold effect of continued education was found over follow-up to have an increase in depressive symptoms as well. The study paradoxically concluded that although education was beneficial for African American men, those graduating with a high school diploma were at additional risk for development of depressive symptoms over a 25-year follow-up.<sup>9</sup>

Another study utilized data from the National Survey of American Life – Adolescent Supplement (NSAL-A) from 2003–2004 to study the link between education and depression in African Americans and Caribbean Blacks.<sup>10</sup> This study concluded that higher education was associated with a lower risk of depression in African Americans, both male and female.<sup>10</sup> The study concluded that further research was needed to investigate how additional factors such as culture or life experiences influence the presence of future depressive symptoms.

Additionally, Lankarani and Assari looked at positive and negative emotions as predictors of chronic medical conditions in African Americans and Caucasians.<sup>11</sup> The study found that although adversity is more common in African American communities, based on the Black versus Caucasian health paradox, African Americans less frequently exhibit depressive symptoms as opposed to Caucasians.<sup>11</sup> The study examines the “undoing hypothesis,” which asserts that positive emotions act as a buffer to undo the harmful effects of negative ones.<sup>11</sup> The researchers assert that African Americans are found to have higher levels of hopefulness. This explains why African Americans are less likely to exhibit depressive symptoms than Caucasians. Depressive symptoms are better predictors of future MDD for Caucasians rather than for African Americans, despite overall higher levels of stress in African Americans.<sup>11</sup> In another study, Assari and Lankarani compared African Americans with Caucasians, examining the correlation between feelings of hopelessness and depression.<sup>12</sup> The researchers discuss how hopelessness and optimistic attitudes vary between ethnicities. They concluded that depressive symptoms are associated with hopelessness in Caucasians more than in African Americans.<sup>12</sup> They offer treatment recommendations based on these conclusions, specifically the idea of burgeoning a positive attitude in therapy to counter depression among Caucasians. African Americans with depression have a tendency to maintain positive attitudes in the face of adversity and foster hope.

Studies have sought to examine what has been described as the two contradictory assumptions underlying research on race differences in psychiatric diagnosis. The first assumption is the “clinician bias” hypothesis, which makes the assumption that each race exhibits depressive symptoms similarly and the fault in misdiagnosis lies with the clinician, who judges each race differently.<sup>13</sup> The other hypothesis is described as “cultural relativity,” which assumes that depression manifests differently in various racial minorities when compared to Caucasians and the clinician is insensitive to the cultural differences between each ethnic group, leading to a

misdiagnosis.<sup>13</sup> These older studies support the idea of cultural relativity, that the clinician himself is unaware and hence unable to properly diagnose depression in a racial minority due to his own shortcomings and lack of understanding. Studies exploring the notion that the clinician himself is unaware of cultural differences have discussed a tool known as the Patient-Centered Culturally Sensitive Health Care model (PC-CSHC model).<sup>3</sup> The PC-CSHC model was developed to help clinicians and providers in promoting culturally sensitive health care practices, leading to a higher level of care for minorities and reducing disparities in treatment between minorities and non-minorities. This model leads to a clinician's greater understanding of disparities across race and ethnicity, leading to a more individually focused treatment that works within the limitations of the patient's cultural framework to provide higher level of care and, as a result, higher level of patient satisfaction and adherence to treatment plans.<sup>3</sup> Studies have also shown differences in presenting symptoms between African Americans and non-Hispanic Caucasians, with one study highlighting the presence of the symptom of negative affect and interpersonal problems domains as a harbinger of depressive disorder in African Americans. The presence of these strongly predicts depressive disorders in African Americans more than in Caucasians.<sup>14</sup>

In addition to discussing boundaries to proper diagnosis of depression, one must also explore boundaries to treatment of disease. When exploring boundaries to sustained and successful treatment of depression among African Americans, it is important to consider disparities in treatment of depression in different health care settings – predominantly in a primary care setting as opposed to a psychiatric setting. Over the years, a greater number of primary care physicians have been using pharmacological means by which to treat patients for psychiatric disorders such as depression. This shift from specialized care under a trained psychiatrist to a primary care setting may present a large disparity in not only recognizing the disease process in certain patients, but also in treatment modalities used to varying degrees of success. In a primary care setting, disparities in treatment may result from failure to properly detect depression or anxiety in minority patients.<sup>15</sup> In addition to failing to recognize depression, primary care physicians may be amenable to prescribing medication to treat symptoms perceived to be indicative of depression, while patients may experience the benefits of one-on-one or group therapy in addition to pharmacological treatment for a sustained remission of disease. Furthermore, ethnic minorities are far less likely to be seen in psychiatry than

in primary care settings.<sup>15</sup> Studies examining disparities in mental health care for primary care and psychiatry showed continuing disparities in diagnoses, counseling/referrals for counseling, and antidepressant medication in primary care visits.<sup>15</sup> After accounting for disparities in diagnosis and treatment modalities among the two preferred avenues of care provided by primary care physicians and by specialists, further disparities in treatment were complicated by educational, linguistic, and cultural barriers.<sup>15</sup>

Studies have examined what has been described as systemic racism in the medical community and have concluded that many Americans of color have restricted access to adequate care and resources due to racialized framing on the part of the provider. Pain is a subjective entity that varies from patient to patient and studies have concluded that it may be susceptible to social psychological influences like negative racial stereotypes that may guide the provider's judgment.<sup>16</sup> In a study published in 2016 conducted at the University of Virginia, researchers examined the role of racial bias in the assessment and treatment of racial minorities to Caucasians by examining false beliefs held by members of the health care community about biological differences between African Americans and Caucasians.<sup>17</sup> This series of studies looked in particular at false beliefs regarding pain as experienced by African Americans versus Caucasians held by Caucasian medical students and residents and found that half of their sample endorsed these false beliefs (ie, that African Americans have thicker skin than Caucasians), which in turn informed their medical judgment and treatment plans.<sup>17</sup> Also, it is important to consider the perception among many that racial minorities are somehow more immune to pain, be it mental or physical, than Caucasians – the idea that simply by virtue of the challenges minorities face in American society on a daily basis that their threshold for psychological pain is greater. A provider working with this assumption may minimize the minority patient's symptoms leading to misdiagnosis. Expanding on this notion of negative racial stereotypes, minority patients may not be taken seriously by the provider working under the assumption that the motivating goal for the patient is secondary gain. For example, a provider may be under the incorrect assumption that a minority patient may falsely exhibit signs and symptoms of anxiety in an effort to obtain medication with potential for abuse. Studies attempting to gauge the extent of health care provider bias toward racial minorities has also had its limitations.<sup>18</sup> Studies have found that when attempting to ascertain provider bias through direct questionnaire-based methods, there is a strong social desirability bias that guides providers'

answers to question such as “When working with minority individuals, I am confident that my conceptualization of client problems do not consist of stereotypes and biases”<sup>18</sup> This “social desirability bias” threatens the validity of answers provided. Studies have opined that it may be possible to reduce such a bias through computer-based questionnaires that rely on the subject’s speed in answering questions posed by relying on “gut reaction” to a posed question.<sup>18</sup> Review articles have suggested that stereotyping of a minority patient by a provider is not a cognitive process that can be quantified or suppressed, but should be taken into account when discussing general barriers in successfully treating minorities.<sup>18</sup> These ingrained biases and stereotypes may be countered through further provider education as well as increased awareness that such prejudices exist and may play a role in clinical judgment and treatment plans.

Further, perceived discrimination plays a significant role in depression among African American youth. Assari et al determined that racial discrimination plays a role in the overall mental health of African Americans. Increased anxiety due to an increased negative psychological stress response to perceived discrimination is prevalent among African American youth.<sup>19</sup> This may lead to feelings of frustration among youth, leading to increased participation in unhealthy behaviors.<sup>19</sup> Further, racial discrimination has been found to shorten telomere length, which has been found to be associated with premature aging.<sup>19</sup> Assari et al concede that their study had limitations, including not accounting for gender or likelihood of seeking psychiatric treatment in these populations. Nevertheless, prior studies have found that African American males are particularly vulnerable to depression following perceived racial discrimination.<sup>19</sup>

Another factor to consider when discussing disparities in depression across racial and ethnic barriers is that of affordability of care and availability of resources. Despite overall growth in antidepressant treatment to alleviate more severe and hindering symptoms of depression, studies show persistent racial and ethnic disparities in medication use among Hispanics and African Americans when compared to Caucasians.<sup>20</sup> Lack of health insurance and access to proper resources among these communities plays a culprit and acts as a barrier to treatment.<sup>20</sup> Recently, the emergence of the Affordable Care Act sought to level the playing field and narrow the discrepancy gap between underprivileged communities and financially thriving ones. The Affordable Care Act made it possible, through the provision of federal subsidies to low-income families, for those in need to obtain health insurance coverage and it is estimated that roughly 26 million people

will purchase insurance through these provisions by 2022.<sup>20</sup> Under the ACA, the number of privately insured individuals who will have access to medications and specialists was planned to increase, especially for racial and ethnic minorities.<sup>20</sup> Some studies looking at antidepressant usage between 2006 and 2010 among minorities found that disparities existed even despite adequate coverage, disparities that have been slowly reduced over time due to interventions such as one-on-one outreach, patient education, and translation services.<sup>20</sup> While insurance expansion itself will not account for disparities in the quality of care provided by primary care physicians versus psychiatrists (ie, misdiagnoses and different treatment modalities in successfully treated depression will continue to exist), the number of patients diagnosed with depression should have an increased and easier access to antidepressant medication as a result of the ACA.<sup>20</sup> Today, under the current administration, there is a potential for revision or repeal of the ACA which would have a devastating impact on health care gains for previously uninsured Americans. If this comes to fruition, many millions of Americans will lose their health insurance, including those populations heavily dependent on Medicaid who have benefitted from the Medicaid expansions provided by the passage of the ACA. Just one of countless examples of how this will affect mental health patients can be found in looking at incarcerated populations in the US, many of whom suffer from chronic physical and mental health issues, substance abuse disorders, etc.<sup>21</sup> This already-marginalized patient population, of which many are from racial and ethnic minority groups, will essentially be left in the dark were the ACA to be repealed, finding themselves not only without existing gains afforded under the ACA, but also without coverage altogether.<sup>21</sup> Repealing the ACA will further widen the already-daunting gap in mental health treatment between majority groups and minorities perhaps to such an extent that bridging the gap may seem futile. Already existing boundaries to treatment for mental health disorders, substance abuse disorders, etc. will be further burgeoned by repeal or revision of the ACA.

Another important aspect when examining barriers to treatment for depression in minority communities is the willingness of patients suffering from depression to seek help from outside sources. Some studies that have examined the relationship among race/ethnicity and use of mental health services available have shown that African American men (30%) in particular with depression are more reticent to use outpatient mental health services to seek help than African American women (39%) and non-African American males (51%).<sup>3</sup> Further studies have examined the role of the values

and belief systems of African American men and their willingness to seek treatment from mental health services available to them. Results from these studies indicated that one potential barrier to seeking therapy was the perception among African Americans that psychotherapy was associated with weakness and diminished pride.<sup>3</sup> The notion that seeking treatment for mental health disorders is perceived as a sign of weakness is further burgeoned by the idea that family concerns such as mental illness should be resolved within the family unit or religious organizations, as would be expected to further demonstrate strength within the community.<sup>3</sup> For those within the community who do seek help, studies raise concern over self-concealment – withholding sensitive information that may foster feelings of shame in the individual, adding another barrier to successful treatment of depression. Other studies have attempted to ascertain common reasons for quitting services providing treatment for mental health issues, the most common reason being individuals wanting to handle the problem themselves.<sup>22</sup> Non-Caucasian individuals at a younger age and lower income level, comorbid conditions, and lower educational attainment are at highest risk of quitting mental health services.<sup>22</sup> African Americans and Hispanic patients are more likely to quit receiving treatment for mental health disorders at high rates than other races/ethnicities.<sup>22</sup> The reasons for this are manifold and include a general sense of mistrust of service providers by patients, racial incongruity between providers and patients, past mistreatment of patients, and the aforementioned cultural perceptions and social stigmas surrounding mental health and treatment.<sup>22</sup>

## Conclusion

Major depressive disorder is a chameleon, changing its stripes as it presents differently across racial and ethnic boundaries. As the literature seems to suggest, disparities are present in all facets of the disease – in risk factors, presentation of disease, type and severity of symptoms, and modalities of care offered. Given the chronic and often severely debilitating nature of the disease as it presents in African Americans, it is important for clinicians in both primary care and specialty settings to be cognizant of these disparities in an attempt to better serve minority communities in need. When faced with the notion that ethnic minorities are less likely to seek mental health care than their Caucasian counterparts, it is also important to consider various social constructs ingrained in the provider (ie, stereotyping) that may limit treatment modalities and approaches when addressing mental illness in minorities. All of these factors play an important role in treatment of ethnic minorities and each must be considered in

order to improve the state of mental health care for minorities to bridge the disparity gap considerably.

## Disclosure

The authors report no conflicts of interest in this work.

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