Comorbidity of Arthritis and Depression in African American, Caucasian and Hispanic/Latina Women

Increasing Awareness, Improving Care

ONLINE CE

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Comorbidity of Arthritis and Depression in African American, Caucasian and Hispanic/Latina Women

Increasing Awareness, Improving Care

(An Online Continuing Education Activity)

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OVERVIEW

This educational activity is for the healthcare professional who is involved in the care of patients who are at high risk for arthritis and comorbidities, such as obesity and depression. At-risk individuals include women and those of African American and Hispanic descent. This group demonstrates "health disparities", which are preventable differences in health status. Health disparities frequently can be attributed to social disadvantages, poverty, inadequate access to care and educational inequality.

Depression and its comorbidities remain a significant public health problem in the United States despite decades of research, recognition and treatment.

Women and specific ethnic groups represent populations that are especially vulnerable to mental health disparities and face unique challenges pertaining to mental health care. Increased physical activity among this population can address both depression and arthritis pain.

Cultural norms and beliefs, however, create situations where patients appear to be non-compliant regarding increasing physical activity, lazy, or disengaged from the healthcare provider's point of view. Culture impacts the continuum of a person's health from the types of illnesses they develop, to expressing their emotions about illness, and how they respond to therapeutic intervention. Thus the clinician's aim should be cultural sensitivity and competence, such that the delivery of care to these high risk groups is effective with better outcomes.

Unless a study specifies a sub-population, this document defines two ethnic groups, per the *U.S. Department of Health and Human Services Office of Minority Health:* Hispanics/Latinos are any person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race, and African Americans are defined as people with origins in any of the Black racial groups of Africa.

LEARNER OBJECTIVES

Upon completion of this activity, the healthcare practitioner should be able to:

1. Define health disparity in relation to arthritis, depression and associated comorbidities.
2. Explain the pathophysiology, risk factors and interventions for osteoarthritis.
3. Identify characteristics of depression, including prevalence, etiology, and provider diagnosis and treatment patterns.
4. Compare the use of common screening tools for depression and behavioral health issues.
5. Discuss the cultural beliefs of African Americans and Hispanic/Latinos with respect to seeking care for mental health issues.
6. Describe the types of physical activity appropriate for those with arthritis, and how this mobility alleviates symptoms
7. Delineate characteristics of a culturally competent healthcare practitioner, and steps that may be taken to improve care.

INTENDED AUDIENCE

This educational activity is for the healthcare professional who is involved in the treatment of African American women and Latinas with musculoskeletal disparities that also present with symptoms of depression.

PROFESSIONAL PRACTICE GAPS

Healthcare providers who are involved in the care of African American, Caucasian and Hispanic/Latina Women with arthritis and comorbidities, such as obesity and depression should be aware of the prevalence of musculoskeletal pain and its relationship to depression. They should be able to identify and address the contributing factors that lead to disparities in health

and wellness when comparing this group of women to the general population. They must also understand the crucial role that culture plays in what and how the care is provided.

ASSESSMENT OF NEED

According to the 2003 Institute of Medicine (IOM) report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*, ethnic and racial minorities receive inferior treatment for their healthcare problems compared to treatment received by others. The review showed that stereotyping, biases and uncertainly on the part of the healthcare providers can contribute to unequal treatment. One in five Americans suffer from doctor-diagnosed arthritis, but among three segments of population the impact is worse. Women, African American and Hispanic/Latina Women have more severe arthritis and functional limitations. The physical pain and arthritic leads to immobility which results in depression. Screening for mental health problems are important in determining levels of depression and appropriate interventions.

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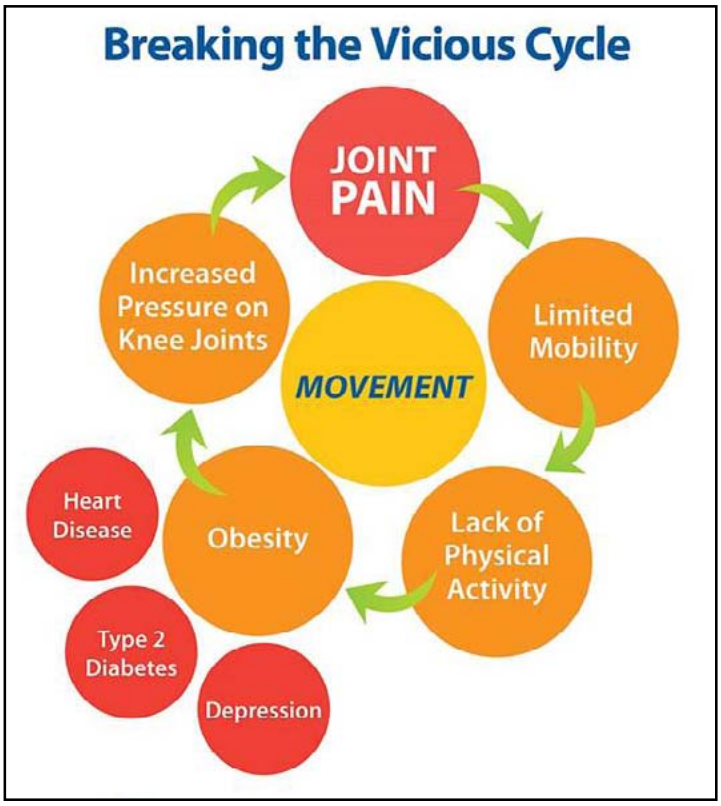
INTRODUCTION

All patients should have equal access to the same scope of healthcare services and expertise, regardless of ethnicity and socioeconomic status. Unfortunately, according to the 2003 Institute of Medicine (IOM) report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare* by Smedley, Stith, and Nelson, ethnic and racial minorities receive inferior treatment for their health problems compared to treatment received by others, even in cases where there is equitable access to care.[2] Their review showed that "stereotyping, biases, and uncertainty on the part of the healthcare providers can all contribute to unequal treatment."[2] More specifically, race, nonverbal communication, and inferential thinking unconsciously alter the clinical encounter between a healthcare provider and a patient. Disparity in the management of musculoskeletal health is one that needs to be addressed and acted upon judiciously.

Movement is Life is a multi-disciplinary coalition seeking to eliminate racial and ethnic disparities in muscle and joint health by promoting physical movement to improve quality of life among women and African Americans and Hispanics. Breaking the Vicious Cycle depicts the focal points of the challenge.

Figure 1: Vicious Cycle



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One in five Americans suffer from doctor-diagnosed arthritis, but among three segments of the population, the impact is worse. Women, African-Americans, and Hispanics have more severe arthritis and functional limitations. These same individuals are more likely to be obese, diabetic, and have higher incidence of heart disease—medical conditions that can be improved with physical activity. Instead of moving, however, these groups have an inactivity rate of 40–50 percent… and this rate is going up!

JOINT PAIN

A CDC study showed that arthritis, a musculoskeletal condition, is one of the most common causes of disability in adults in the United States, as represented in Figure 1,[3] and among the leading conditions causing work limitations.[4] It has been projected that the number of adults with a confirmed diagnosis of arthritis will reach 67 million, or 25% of the adult population, by the year 2030.[5] Osteoarthritis is the most common type of arthritis with an estimated 27 million Americans, age 25 and older, affected by the condition. The percentage of people who suffer with the condition increases with age.[6]

Overall, female, African American and Hispanics experience a higher severity of osteoarthritis and limitations of mobility, largely due to comorbidities disproportionately experienced by this population such as diabetes, obesity, heart disease and depression.[7]

In many instances, these comorbidities, along with osteoarthritic pain, result in inactivity. Subsequently, some individuals may begin to withdraw from work, social activities, and medical treatment. While healthcare providers (HCP) might perceive these patients as being lazy and non-compliant, this high-risk group may be experiencing a level of depression that could become increasingly debilitating if the appropriate interventions are not utilized.[8]

"Depression" can range from mild to serious, temporary to persistent, and may exhibit a range of symptoms. Depression is commonly diagnosed by mental health providers following published guidelines by the American Psychiatric Association. Some of the noteworthy symptoms that healthcare practitioners can be alert to include:

- Feeling empty, sad or tearful for about two weeks or longer
- Reduced interest in most daily activities at home, school, work
- Change in appetite, including weight gain or loss
- Restlessness, fatigue, insomnia
- Difficulty making decisions or concentrating
- Recurrent thoughts of ending life

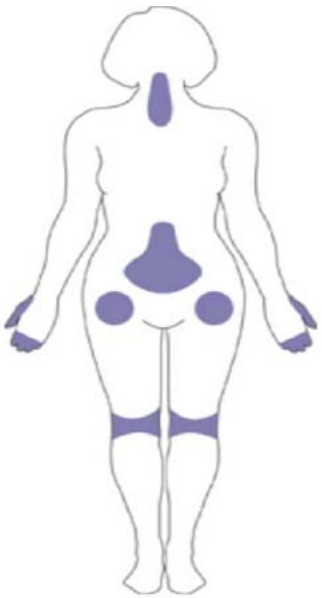
Observing and documenting the above types of symptoms, especially in relation to musculoskeletal disabilities, may be important for identifying and treating depression as a comorbidity.

Today, more than a decade since the IOM *Unequal Treatment* report, there is still the need for multi-disciplinary discussion among healthcare providers regarding favorable approaches to reduce and ultimately eliminate disparities. With growing diversity among ethnicities and nationalities, it is imperative that evidence-based clinical efforts, steeped in culturally specific community-based programs and innovative multidisciplinary research, are routinely used to improve longevity and quality of life for vulnerable and high-risk populations that include women and minorities. [9]

LIMITED MOBILITY

Musculoskeletal conditions define injuries or pain that affect the muscles, bones, joints, and nerves that support the neck, shoulders, arms, hands, wrists, back, hips, legs, knees, and feet[10, 11] as seen in figure 2.

Figure 2: Areas that Osteoarthritis Affects



Overall, female, African American and Hispanics experience a higher severity of osteoarthritis and limitations of mobility.

Source: National Institute of Arthritis and Musculoskeletal and Skin Disorders http://www.niams.nih.gov/Health_info/Osteoarthritis/default.asp

Musculoskeletal conditions are extremely common and prevalence increases markedly with age. They can be affected by lifestyle factors such as obesity, nutritional health, depression, and lack of physical activity. Diverse in pathophysiology, they are linked anatomically and by their association with pain and impaired physical function. They encompass a spectrum of conditions, from those of acute onset and short duration, to lifelong disorders. Early diagnosis is the key to ease pain while potentially decreasing further bodily damage.

In a 2012 National Health Interview Survey (NHIS) analysis, more than 34.5 million adult participants age 18 years and older (13% of the population) reported that they have difficulty performing routine activities of daily living because of medical conditions. Half of the participants had a musculoskeletal condition that limited their activity. (see table 1)

Table 1: Self-Reported Limitations in Activities of Daily Living Due to Select Medical Conditions by Age

Source: US Department of Health and Human Services

	Total Persons with Limitation (in 000s)					
Condition	0-17	18-44	45-64	65-74	75+	Total All Ages
Musculoskeletal [1]	282	2,242	8,196	3,213	4,096	18,211
Circulatory [2]	*	657	3,735	2,031	2,591	9,014
Depression/Anxiety/Emotional Problem [3]	1,142	1,568	2,342	446	360	5,857
Diabetes	*	318	1,972	1,010	919	4,218
Respiratory (Lung/Breathing Problem)	482	420	1,651	694	670	3,917
Nervous System [4]/Sensory Organ	115	878	1,563	440	469	3,492
Vision Problem	244	361	1,134	492	881	3,111
Hearing Problem	199	229	592	288	765	2,072
Cancer	*	132	724	353	387	1,597
Birth Defects/Mental Retardation/ Developmental Problem	583	1,045	415	*	*	2,198
Other Condition/Disorder	3,974	1,458	2,710	1,102	2,306	11,550
Total All Conditions	6,274	6,649	14,240	5,859	7,802	40,825

Source: US Department of Health and Human Services http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=64

Osteoarthritis (OA)

Osteoarthritis, also referred to as degenerative joint disease (DJD), is a musculoskeletal condition and the most common type of arthritis as described by the National Institute of Arthritis and Musculoskeletal and Skin Disease (NIAMS). OA, seen especially among older people, mostly affects cartilage, the hard but slippery tissue that covers the ends of bones at a joint.[12] Healthy cartilage allows bones to glide over one another and absorbs energy from the shock of physical movement. In osteoarthritis, the surface layer of cartilage wears away. (see figure 3) This causes bones under the cartilage to rub together, and over time, the joint may lose its normal shape. Bone spurs may form on the edges of the joint and bits of bone or cartilage can break off and float inside the joint space causing more pain and damage.

Clinically, the condition is characterized by joint pain, tenderness, limitation of movement, crepitus, occasional effusion, and localized inflammation. It can occur in any joint but is most common in the hip, knee, and the joints of the hand, foot, and spine. Unlike some other forms of arthritis, OA affects only joint function and not skin tissue, lungs, eyes, or blood vessels. Symptoms can be relieved and function improved, but progression cannot be prevented. Osteoarthritis is a joint disease that mostly affects cartilage.

Risk Factors and Common Interventions for OA

There are many factors that can increase a person's chance of developing OA. Among those factors are joint overuse, injury, obesity, heredity and age. [13]

Joint Overuse. Overuse of joints increases the risk of developing OA, particularly in people with jobs that require repeated bending of the knees or hips. Individuals with occupations that include a high level of repetitive joint stress, such as construction, farming, ranching and other manual labor jobs, tend to be at greater risk for developing OA.[14]

Injury. People with joint injuries due to sports, work-related activity, or accidents may be at increased risk of developing OA. In addition, people who have had a severe back injury may be predisposed to develop osteoarthritis of the spine. People who have had a broken bone near a joint are prone to develop osteoarthritis in that joint.

Obesity. Maintaining an ideal weight or losing excess weight may help prevent osteoarthritis of the knees, hips, and back.

Heredity. Some people have an inherited defect in one of the genes responsible for making cartilage. This can cause defective cartilage and lead to more rapid deterioration of joints. People born with joint abnormalities are more likely to develop osteoarthritis, and those born with an abnormality of the spine (e.g., scoliosis) have an increased likelihood of developing osteoarthritis of the spine.

Age. Although age is a risk factor, research has shown that OA is not an inevitable part of aging.

People of any race or ethnicity can be affected by osteoarthritis; however, studies suggest that African American and Hispanic/Latino Americans may be at risk for poorer outcomes (such as pain and disability), and are less likely to undergo treatment compared to Caucasian Americans. Treatment of OA focuses on decreasing pain and improving joint movement.[15]

Lifestyle Modification as Treatment. Weight control may be the primary method for decreasing the pain and impaired function associated with OA. Achieving an optimal body weight can reduce physical stress on weight-bearing joints. Physical activity is another key method which can improve joint movement and strengthen the muscles that surround the joints. Exercises that create less stress on the joints, such as swimming, are recommended.

Therapies and Interventions for OA. Depending on the discomfort and severity, arthritis may be managed by a variety of methods. To alleviate pain and inflammation, hot and cold compresses, or soaking in a warm bath may be effective. Medication, such as analgesics and anti-inflammatory agents may be prescribed to reduce pain and swelling in the joints. Medication may be prescription pills, an injection, or topical treatment.[15] Some evidence supports the effective use of supplements, such as glucosamine and chondroitin, which may relieve pain in some people with osteoarthritis, especially in the knee. Acupuncture may also be an effective pain management option for some. When the above less invasive treatment options have not proven to be effective, some people elect to have surgery, such as joint replacement, to repair damaged joints.

Musculoskeletal Disparities

The word "populations" can be defined by race or ethnicity, gender, education or income, disability, geographic location, or sexual orientation. The Centers for Disease Control and Prevention (CDC) defines health disparities as "preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations."[16]

As such, health disparities are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources.[17]

Prevalence of Musculoskeletal Disorders

Annually, the CDC examines the prevalence of musculoskeletal disorders and its effects among US adults across several racial and ethnic groups through the National Health Interview Survey, conducted by the National Center for Health Statistics. Their most recent study showed a prevalence of 24% in Caucasian Americans, 19% in African Americans and

11% in Hispanics and Latinos.[17] Of those who reported musculoskeletal conditions, activity limitation was reported in 36% of Caucasians, 45% of African Americans and 43% of Hispanics and Latinos. Both work limitations and severe pain were significantly higher among Hispanics/Latinos and African Americans, compared to non-Hispanic white people.[17]

Statistically, Caucasians demonstrate the highest prevalence of musculoskeletal conditions, yet the ethnic minorities experience greater pain and impact on mobility and activities of daily living. Ethnic minorities also experience higher comorbidities, such as obesity, cardiovascular disease and diabetes than Caucasians.

Musculoskeletal pathology and comorbidities found in ethnic minorities reflect health and treatment disparities, which may be a result of several factors including socioeconomic status, inadequate access to care and quality of care. Findings of various studies suggest that efforts by healthcare providers to identify and manage comorbidities (eg, obesity, diabetes) could directly impact the prevalence of musculoskeletal disorders in these groups.

Multi-ethnic studies on the prevalence of musculoskeletal disorders in women have been quite revealing. The Women's Health Initiative (WHI) conducted an analysis published in 2008 that assessed risk factors for self-reported osteoarthritis in an ethnically diverse cohort of women. The participants were postmenopausal women aged 50 to 79 (n=146,494). The results from the group's analysis showed, as had many studies previously, that race, age, and body mass index (BMI) were confirmed as risk factors for osteoarthritis. In women age 60 and above, African American and Hispanic/Latina women were more likely to develop osteoarthritis than Caucasian American women. Overall, the prevalence of OA increased with age. In this category, the prevalence of obesity (defined as BMI greater than or equal to 30) was highest in African American women and lowest in Caucasian women.[18]

In another study presented at the 2012 annual meeting of the American College of Rheumatology, African American women had the highest risk of developing knee OA, with Hispanic women being second highest. Their findings were attributed to African American and Hispanic women having higher instances of being overweight, a major risk factor for developing knee OA that is consistent with the majority of studies in this area.[19]

THE INFLUENCE OF ETHNICITY AND PAIN

In a population-based survey by Reyes-Gibby, et.al., 27% of African Americans and 28% of Hispanics over the age of 50 reported having severe pain most of the time; only 17% of non-Hispanic whites did.[20] African Americans were found to have lower pain thresholds than Caucasian Americans. They were also more likely than non-Hispanic whites to underreport pain unpleasantness in the clinical setting, especially in the presence of physicians who were perceived as having "higher social status".[21] African Americans were more likely to attribute pain to personal inadequacies and to use "passive" coping strategies, such as prayer.[21]

Compared to Caucasians, African Americans and Hispanic/Latino Americans were more afraid of opioid addiction, and were less likely to misuse prescription opioids. African Americans and Hispanic/Latino Americans were less likely than Caucasians to receive any pain medication and more likely to receive lower doses of pain medication, despite higher pain scores. Several studies of patients with lower back pain found that African Americans reported greater pain and higher levels of disability than Caucasians, but were rated by their clinicians as having less severe pain.[21]

These findings suggest that clinicians incorrectly, and possibly unconsciously, believe that Hispanic/Latino American and

African American patients experience less severe pain than Caucasian Americans, when in fact they report comparable pain. Another assumption is that Hispanic/Latino Americans and African American patients are more likely to abuse drugs than Caucasian Americans and therefore should have less access to them, when in fact they are less likely to do so. The findings suggest, in other words, that variations in treatment are based on misconceptions rather than evidence.

DEPRESSION

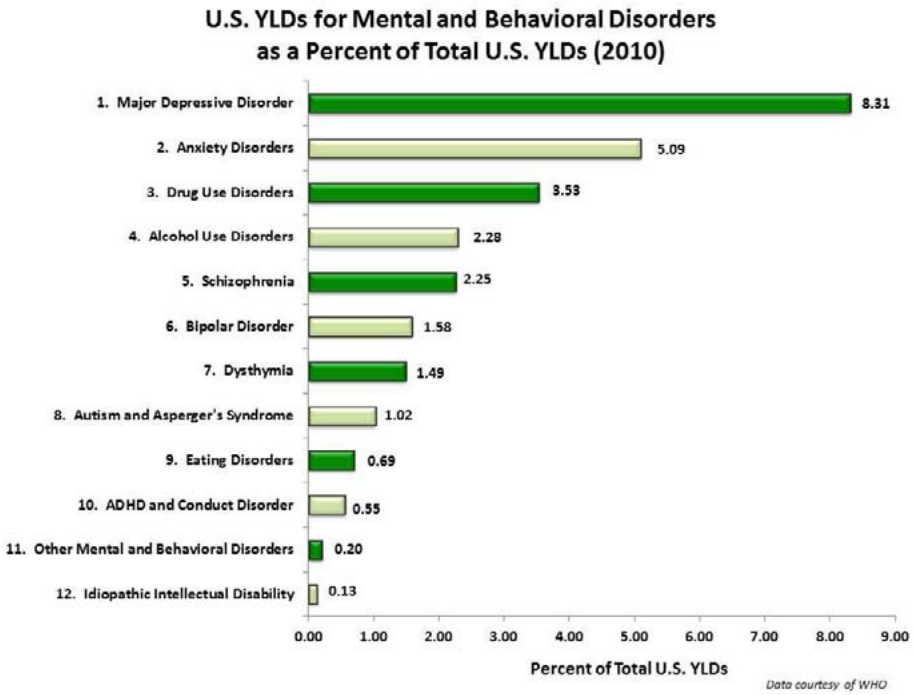
It is not uncommon for people to feel blue or sad on occasion. These feelings are typically short-lived and resolve within a couple of days. However, when someone has a depressive disorder it interferes with daily life and can cause pain for the individual and those close to them.[22] Depression is one of the most common mental health problems in the United States despite decades of research, recognition and treatment. Comorbidities associated with clinical depression still remain a significant public health problem in the United States.

Depression is one of the most common mental health problems in the United States despite decades of research, recognition and treatment.

Depression is caused by a combination of genetic, biological, environmental and psychological factors. A common myth about depression is that it is "normal" for certain people to feel depressed (e.g., senior citizens, new mothers, menopausal women, or those with a chronic illness). The truth is that depression is not a normal part of life for anyone. Signs and symptoms associated with depression are a feeling of hopelessness and worthlessness, overeating, insomnia, restlessness, aches and pains. There are several forms of depressive disorders. An episode can occur once in a person's lifetime or a person could have several episodes. Some individuals have persistent depression that lasts for at least 2 years,22 while others exhibit symptoms that develop under unique circumstances such as seasonal, post partum and psychotic.

Depression affects approximately 14.8 million adults; and women ages 18 to 45 years old account for the largest proportion of functional impairment of this group.[23] In 2012, an estimated 16 million adults aged 18 or older in the U.S. had at least one major depressive episode in the past year. This represented 6.9% of all U.S. adults. According to the World Health Organization (WHO; 2010), major depression also carries the heaviest burden of disability among mental and behavioral disorders and accounts for 8.3% of all U.S. years lived with disability (YLDs, figure 3).

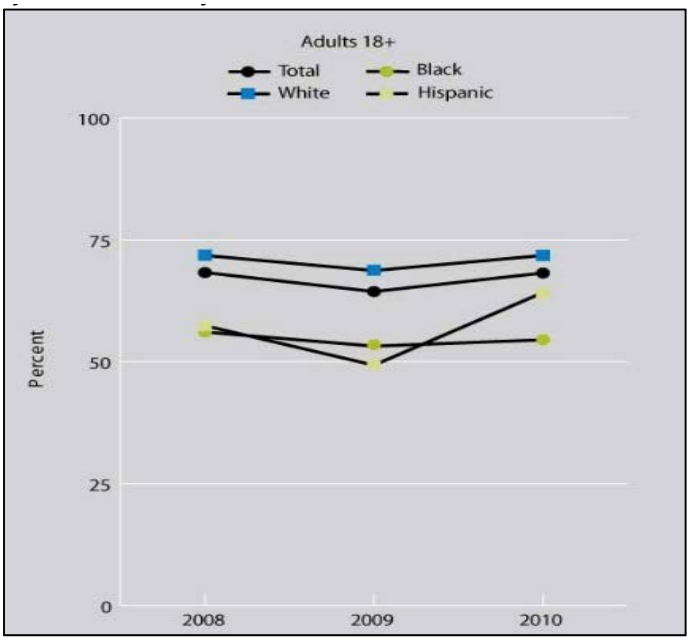
Figure 3: Percent Totals YLDs: Mental and Behavioral Disorders as a Percent of Total U.S. YLDs (2010)



In 2010, only 68% of adults (see figure 4) and 38% of adolescents with a major depressive episode received treatment for

depression, as published in the 2012 National Healthcare Disparities Report (NHDR). In all years, African American and Hispanic adults were less likely to receive treatment for depression than Caucasian American adults.

Figure 4: Adults Who Experienced Major Depression and Treatment within the Same Year by Race/Ethnicity, 2008 – 2010



Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, 2008-2010.

A 2007 Science Update, by the National Institute of Mental Health (NIMH), referenced a special issue of *Research in Human Development*, published in the same year that examined then current trends in prevalence and risk factors for mental health disorders across the lifespan in diverse U.S. minority populations. [24, 25] Notable findings from the special issue showed that of the more than 2,554 Latinos interviewed for the National Latino and Asian American Study (NLAAS), age at time of immigration was a factor in the mental health of this diverse minority population. According to Margarita Alegría, PhD., et.al., in general, the older the person at immigration, the later the onset of psychiatric disorders. Those who arrived later in life had lower lifetime prevalence rates than younger immigrants or U.S. born Latinos. However, after about age 30, the risk of depressive disorders increased among these later-arriving Latino immigrants, whereas risk tended to decrease between ages 30-40 for U.S. born Latinos and immigrants arriving before age seven. Latinos arriving between ages 0-6 had very high risks of onset shortly after immigration, but after several years, their lifetime prevalence rates approached those of Latinos born in the United States.[25]

According to a NIMH-funded analysis published in the American Journal of Public Health in 2011, older racial and ethnic minorities are less likely to be diagnosed with depression than their Caucasian counterparts, but are also less likely to get treated once they are diagnosed.[26]

Ayse Akincigil Ph.D, et.al., found that about 6.4% of Caucasian American patients, 4.2% of African Americans, and 7.2% of Hispanics were diagnosed with depression. Among those diagnosed, 73% of Caucasian Americans received treatment (either with antidepressants, psychotherapy or both); while 60% of African Americans received treatment and 63.4% of Hispanics received treatment. These kinds of diagnosis and treatment differences are consistent with previous studies, the researchers noted. Although they noted pronounced differences in socioeconomic status and quality of insurance coverage across ethnicities, these differences did not appear to account for the disparities in diagnosis or treatment rates.

The significance of these findings is consistent with the notion that depression continues to be under-recognized and undertreated among older minorities. According to the researchers, future investigation should explore cultural factors, such as help-seeking patterns, stigma, and patient attitudes and knowledge about depression as potential aspects contributing to the disparities.

THE LINK BETWEEN PAIN AND DEPRESSION

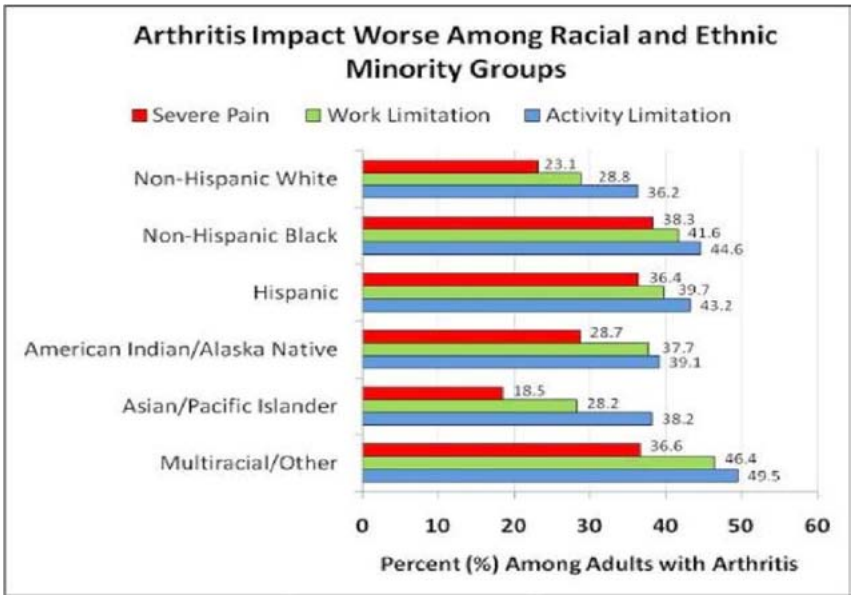
Major depression can be associated with painful physical symptoms such as headache, backache, stomachache, joint ache, and muscle ache. Because depression and pain share a common neuro-chemical pathway in that they are both influenced by serotonin and norepinephrine, depression and associated painful physical symptoms must be treated together in order to achieve remission.[27] In fact, research has shown that improvement of physical symptoms was correlated with the improvement of other depression symptoms, which suggests that the patient's ability to achieve depression remission may be directly [28] related to the reduction of painful physical symptoms.

People with prolonged pain have three times the average risk of developing psychiatric symptoms, usually mood or anxiety disorders. Physical symptoms are common in depression and vague aches and pain are often the presenting symptoms of depression.[27] Studies have shown that depressed patients have three times the average risk of developing chronic pain.[28] It is a complex experience because pain is depressing, and depression causes and intensifies pain.

This is especially significant because in a 2010 issue of Preventing Chronic

Disease, the CDC reported that compared with Caucasian Americans, African Americans and Hispanic/Latino Americans have higher rates of activity limitation and severe pain related to arthritis.

Figure 5: Arthritis Impact Worse among Racial and Ethnic Minority Groups



Dr. Patricia A. Parmelee, et. al., conducted a cross-sectional study, published in 2012, that examined how race and sex affects associations among OA pain, disability, and depression. The study included 363 African American and Caucasian adults who self-reported pain, disability and depressive symptoms. The results of the study revealed that women experienced greater pain and marginally greater disability than men. At a deeper level, African American women reported greater disability and marginally greater pain than Caucasian women.[30]

In a study of 130,880 people from the Canadian Community Health Survey, it was found that those with arthritis experienced twice the rate of major depression and suicidal thoughts as those who didn't have the disease.[31]

In a study by Louise B. Murphy, et.al., the primary objective was to estimate the prevalence and correlation of anxiety and depression among US adults (ages ≥45 years old) with doctor-diagnosed arthritis (n = 1,793) from the Arthritis Conditions Health Effects Survey. Anxiety and depression were measured using separate and validated subscales of the Arthritis Impact Measurement Scales. Prevalence was estimated for the sample overall and stratified by subgroups.[32]

The results of the study were that anxiety was more common than depression (31% and 18%, respectively). Overall, one-third of respondents reported at least one of the two conditions. Most (84%) of those with depression also had anxiety. Only half of the respondents with anxiety and/or depression had sought help for their mental health condition in the past year. Given the high prevalence of depression and anxiety among the participants, their profound impact on quality of life, and the range of effective treatments available, Louse B. Murphy, et. al., concluded that healthcare professionals should be encouraged to screen all people with arthritis for both anxiety and depression.[32]

Likely Causes (Other Than Pain) of Depression in People with OA

In addition to experiencing physical pain, individuals with OA are confronted with challenges that have the potential to affect their lifestyle and finances. Unanticipated dynamics such as these can intensify or exacerbate depression with lifestyle effects that include:[27]

- anxiety
- feelings of helplessness
- limitations of daily activities
- job limitations
- difficulty participating in everyday personal social activities and responsibilities.

Potential financial effects include:

- the cost of treatment
- wages lost because of disability.

Symptoms associated with depression include joint, limb and back pain, gastrointestinal problems, fatigue, psychomotor activity changes, and appetite changes. In the primary care setting, a high percentage of patients with depression present exclusively with physical symptoms.[27]

SCREENING FOR DEPRESSION

Screening for mental health problems is important, especially in primary care settings. Screening tools, self-administered or practitioner administered, have become useful in diagnosing depression and other mental illnesses and assessing the severity of depression. The scores provide indicative ranges for depression severity that can be useful for clinical and research purposes; however, they cannot take the place of a comprehensive clinical interview for confirming a diagnosis of depression.

The Patient Health Questionnaire-2 (PHQ-2 – http://cqaimh.org/pdf/tool_phq2.pdf

The Patient Health Questionaire-2 (PHQ-2) is used to inquire about the frequency of depressed mood and anhedonia over the past two weeks. It is a two item test that is very simple to use as a screening method in any area of the clinic, hospital or home care setting. The purpose is to not establish a final diagnosis or to monitor depression severity, but rather to screen for depression in a "first step" approach. Patients who screen positive should be further evaluated with the PHQ-9 to determine whether they meet criteria for a depressive disorder. A PHQ-2 score ranges from 0-6. The authors identified a PHQ-2 cutoff score of 3 as the optimal cut point for screening purposes and stated that a cut point of 2 would enhance sensitivity, whereas a cut point of 4 would improve specificity.

The Patient Health Questionnaire – 2 (PHQ-2)

Patient Name_____ Date of Visit_____

Over the past two weeks, how often have you been bothered by any of the following problems?	Not at All	Several Days	More Than Half the Days	Nearly Every Day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed or hopeless	0	1	2	3

Kroenke K. The Patient Health Questionnaire-2 (PHQ-2): validity of a two-item depression screener. *Medical Care*. 2003;(41):1284-1294.

Zung Self-rating Depression Scale – http://healthnet.umassmed.edu/mhealth/ZungSelfRatedDepressionScale.pdf

The Zung Self-Rating Depression Scale is a short, self-administered survey to quantify the depressed status of a patient. There are 20 items on the scale that rate the affective, psychological and somatic symptoms associated with depression.[33] The questions and items are framed in terms of positive and negative statements; each item is scored on a Likert scale ranging from 1 to 4 (based on these replies: "a little of the time", "some of the time", "good part of the time", "most of the time"). Scores on the survey range from 20 through 80 and fall into four groupings:

- 20-44 Normal Range
- 45-59 Mildly Depressed
- 60-69 Moderately Depressed
- 70 and above Severely Depressed

The Zung scale is frequently used in research. Physicians and other industry experts have tested its validity extensively and determined it to be a sensitive measure of clinical severity in depressed patients.

Beck Depression Inventory II – http://ibogaine.desk.nl/graphics/3639b1c_23.pdf

The Beck Depression Inventory (BDI-II) is a 21-question, multiple-choice, self-report inventory[34] one of the most widely used instruments for measuring depression and its severity. The BDI is composed of items relating to symptoms of depression such as hopelessness and irritability; cognitions such as guilt or feelings of being punished; as well as physical symptoms such as fatigue, weight loss and lack of libido.[35]

The efficacy of the BDI-II has been validated against similar instruments and showed to positively correlate with other respected rating scales as well high internal consistency.

Global Assessment of Functioning (GAF) – http://www.alphabehavioralcare.com/self-test/depression-test

The Global Assessment of Functioning (GAF) assigns a clinical judgment in numerical fashion to a patient's overall functioning level. It was created in 1962 and first published in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) in 1987, by the American Psychiatric Association, to provide a common language and standard criteria for the classification of mental disorders.

The purpose of using the GAF tool is to enable healthcare professionals to obtain information about global functioning, to supplement information that they have received from the patient about their medical history and symptoms, and to help predict the allocation and potential outcomes of mental health treatment. Many experts question the reliability and validity of the GAF and its ability to predict the likelihood of future mental health episodes.[36]

Behavioral Risk Factor Surveillance System (CDC) – http://www.cdc.gov/mentalhealth/data_stats/pdf/nhanes_depression_screener.pdf

The Behavioral Risk Factor Surveillance System (BRFSS) is the world's largest, continuously conducted telephone health survey system.[37]

The BRFSS uses data collected to assess risk for chronic disease, identify demographic differences and trends in health-related behaviors, address emergent and critical health issues, formulate policy and legislation for health initiatives and to design and monitor health interventions and services.[37]

The questionnaire has three parts:

- Core component questions: This section consists of the fixed core, rotating core, and emerging core questions that cover demographics, general health behaviors topics and "late breaking"[29]issues. All health departments must ask the core component questions without modification in wording.
- Optional modules: This section is used in alternating years when the rotating core questions are not used.
- State-added questions: This section is customized based on health and wellness trends experienced by individual states.

The BRFSS is considered the gold standard[37] in behavioral surveillance and states have used BRFSS to address urgent and emerging health issues. It was used to monitor the influenza vaccine shortage during the 2004–2005 flu season. Following Hurricanes Katrina and Rita, four Gulf Coast states used it to assess the impact of both events. During the 2009 H1N1 flu pandemic, modules related to influenza-like illness, and seasonal and H1N1 vaccinations were added to the survey.[37]

Missed Opportunities for Depression Screening

Depression screening guidelines have been endorsed for high-risk groups, such as individuals with arthritis, in an effort to be proactive in using appropriate interventions. Although this is widely known, individuals with arthritis are often not screened.

A study, looking at data between 2006 and 2010, set out to examine national rates of depression and depression screening for patients with arthritis. Published in 2013, the study revealed that of the 644,419,374 visits where arthritis was listed as a health issue, 83,574,127 (13%) were associated with a comorbid diagnosis of depression. Despite the high prevalence of depression with arthritis, screening for depression was performed at few arthritis visits, representing missed opportunities to detect a common, serious comorbidity. In fact, in this study, depression screening occurred at 3,835,000 (1%) visits associated with arthritis.[36]

The recommendation from the study was to improve depression screening by providers to identify affected patients and increase instances of appropriate interventions, such as mental health referrals and/or treatment with antidepressants.[36]

BELIEFS AND CULTURE NORMS IN MINORITIES THAT AFFECT DEPRESSION

There are a variety of misconceptions regarding depression within the African American and Hispanic and Latino community. Younger generations of these ethnic groups may feel that they should have little reason to be depressed when their lives are less burdened, and their ancestors have overcome so much. Also, mental disorders represent weakness in these communities and it's an unspoken belief that it is shameful to seek mental health assistance in place of religion. Spiritual support can be an important part of healing, but the care of a qualified mental health professional is essential.

Ethnic and racial minorities may be less likely to seek help for depression, and those with lower incomes may have more difficulty gaining access to specialized health care. In addition, they may be more likely to seek help from nonmedical providers, such as pastors or lay counselors, according to the researchers. Other research has suggested that minorities tend to cite stigma or shame associated with having a mental disorder as a reason for not seeking help for depression.[26] Relative to depression, ethnic minorities are more likely to experience higher degrees of functional limitation and chronicity compared to Caucasian Americans.[37, 38]

Working age adults may feel ashamed to acknowledge depression for fear that it will impact their job by discrediting them as a leader and preventing them from advancing. The tendency is to minimize the significance of stress therefore ignoring the threat of mental illness and striving to overcome problems through self-reliance and determination.

The African American Community

In 2013, the population of African Americans (including individuals claiming an additional race) was estimated at 45 million, making up 15.2% of the total U.S. population. Those who identified as only African American were estimated at over 41.7 million, 13.2% of the U.S. population.[39] The U.S. Census

Bureau projects that there will be 74.5 million African Americans in the United States by the year 2060.[40]

Access and Views on Healthcare within the African American Community

It is important for healthcare professionals to recognize the impact of historical discrimination, and consequent potential for mistrust and fear.[41] Many African Americans have a religious orientation or viewpoint grounded in African American social and cultural history, which often emphasizes a holistic approach to health and healthcare.[42] Over the decades, church became the source of healing for both body and soul when often there was no other healthcare available.[43]

Depression and African Americans

Misdiagnosis and under-treatment of depression is especially common within the African American community. Many African Americans do not seek treatment because it is viewed as a personal weakness, not a health problem.

The National Survey of American Life: a study of racial, ethnic and cultural influences on mental disorders and mental health, provided evidence of African Americans exhibiting certain characteristics such as shame and fear. For example, avoiding emotions was, and continues to be, a survival technique that has evolved into a cultural habit. Five reasons a majority of the population withholds information about their depression includes:[44]

- potential to hurt family members
- fear that being open about mental illness could ruin their career
- others might label them as "crazy"
- obligation to always appear strong

Several studies, including Dr. Earlise Ward, et.al., have examined African Americans' beliefs about mental illness and attitudes toward seeking mental health services. Their findings support those above, in that African Americans generally prefer coping on their own.[45] For the study, her team conducted an exploratory, cross-sectional survey of 272 African Americans. According to the study, among the group participants, depression was the most common mental illness (without respect to gender). Both men and women believed they were aware of the symptoms and causal factors of mental illness; however, their reluctance to seek treatment suggested they were not very open to acknowledging psychological problems, and were very concerned about the associated stigma.

The Hispanic/Latino American Community

Demographic Statistics

Hispanics/Latinos are the nation's largest minority group, representing 16.4% of the U.S. population. They are a heterogeneous culture with most possessing a common ancestry in people speaking the Spanish language and/or emigrating from Latin America. Family-oriented cultural values and poverty are also commonly shared features among the subgroups.[46] Ten Hispanic origin subgroups make up 92% of the U.S. Hispanic population.

Of the 50.7 million Hispanic/Latino Americans in the country, 33 million self-identify as being of Mexican origin, according to tabulations of the 2010 American Community Survey (ACS) by the Pew Hispanic Center. Puerto Ricans, the nation's second largest Hispanic origin group, make up just 9% of the total Hispanic population in the 50 states and the District of Columbia.[47]

Subgroups within the Hispanic/Latin American community differ from each other in a variety of ways to include factors that can influence healthcare disparities. The differences highlighted in this section are examples of a much larger corpus of ethnic differences. For instance, those of Mexican origin have the lowest median age, at 25 years, while others of Cuban origin have the highest median age, at 40 years. Colombians are the most likely to have a college degree (32%) while Salvadorans are the least likely (7%). Ecuadorians have the highest annual median household income ($50,000) while Dominicans have the lowest ($34,000). Half of Hondurans do not have health insurance-the highest share among Hispanic origin groups. By contrast, just 15% of Puerto Ricans do not have health insurance. Overall, nearly one-third of Hispanic/Latino Americans (30.7%) lack coverage.[48]

It is important to note that there are several subgroups within the Hispanic and Latin American community that differ culturally in many ways.

Access and Views on Healthcare within the Hispanic/Latino Communities

There is ample evidence that Hispanic/Latino Americans, especially those of Mexican and Central American origin, face significant barriers to obtaining health care, particularly where language barriers exist.[49] Many hospitals and healthcare offices lack trained interpreters and rely on ad hoc interpretation by family members of the patient, or by bilingual staff who may not be certified in medical interpretation. Compounding the language barrier is the issue of false fluency; when healthcare professionals mistake the meaning of a Spanish word because of unfamiliarity with cultural or linguistic intricacies.[49]

There is also cultural mistrust coupled with a predisposition to seek alternative healthcare as a first resort, thus delaying conventional and important treatment.

Some healing traditions include Santeria in Brazil and Cuba, Espiritismo in

Puerto Rico, and Curanderismo in Mexico and much of Latin America.[50] Curanderos, traditional healers, distinguish between "hot" or "cold" illnesses such as:[51]

- Cold conditions

- Cancer
- Indigestion (empacho)
- Headache
- Pneumonia
- Upper respiratory infections

Hot conditions

- Anger (bilis)
- Diabetes mellitus
- Hypertension
- Mal de ojo (“evil eye”)
- Pregnancy
- Sore throat or infection
- Susto (“soul loss”)

Latinos are also accustomed to self-treating because most pharmaceuticals are available without prescription in their home countries. The consequence of these barriers is a marked disparity in the quality of care that Hispanic/Latino patients receive.

Depression and Hispanic/Latino Americans

In some cases Hispanic/Latino Americans find the strain of acculturation overwhelming. Their traditional values and beliefs are often at odds with the “American” culture.

Among some Hispanic/Latino Americans, depression may be mistaken for nervousness, tiredness or a physical ailment, and may be viewed as something temporary by the individual. To expound on the point made above, many Hispanics/Latino Americans rely on their extended family, community, traditional healers, and/or churches for help during a health crisis. As a result, thousands of Hispanics/Latinos with mental illness go without professional mental health treatment.

Hispanic/Latino Americans also have disproportionately higher rates of obesity and diabetes mellitus[52, 53, 54, 55] that can intensify depression, especially in cases where the individual is not willing to change cultural nutritional and eating habits to reduce their risk.

Cultural Values Represented in the Healthcare Setting

Latino culture has several normative values that should be recognized in the clinical setting. They include simpatía (kindness), personalismo (friendliness), and respeto (respect). Simpatía emphasizes politeness and conflict avoidance. Personalismo is about achieving a personal connection, typically achieved by asking about the patient and their family. People in many Latino cultures are comfortable with standing close to each other, so physical proximity is also perceived as being more personable. Respeto implies attentive concern for the patient as well as respect of their age, especially in senior citizens.[56]

Unconscious Bias and Stereotyping of Patients with Depression

There are two types of biases: explicit (or conscious bias) and implicit (or unconscious bias). An explicit bias is the kind of attitude that you deliberately think about and report. Explicit bias accounts for many cases of discrimination and should not be tolerated. An unconscious bias can be summed up as a prejudice, or an assumption that is made about another person based on pervasive cultural stereotypes, rather than deliberate judgment. Both are harmful and should not be tolerated.

Research shows that when people hold a negative stereotype about a group and meet someone from that group, they often treat that person differently and honestly don't even realize it.[57]

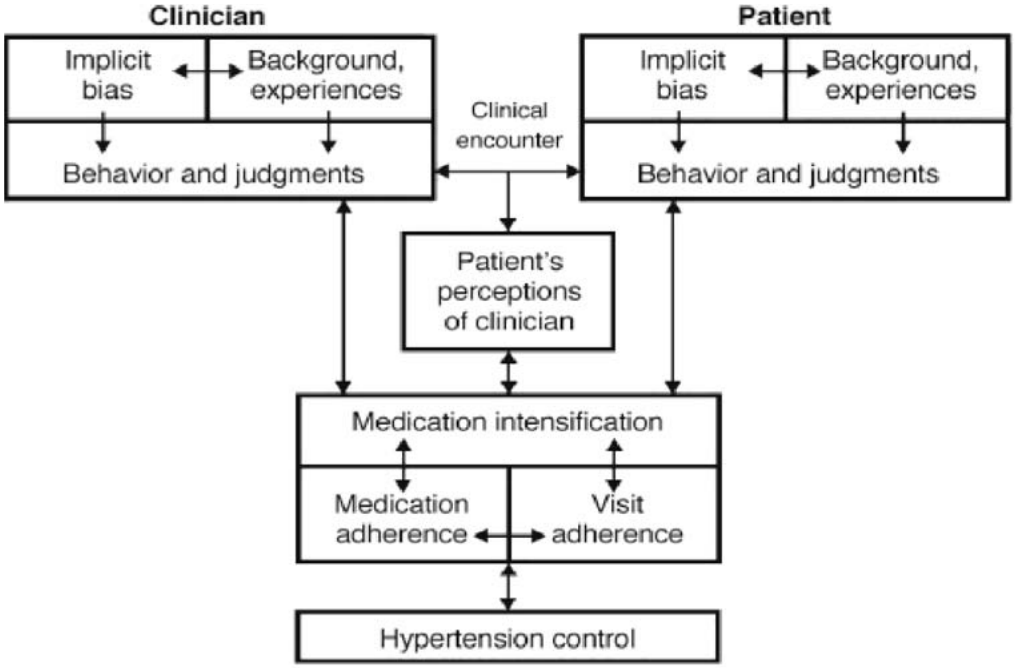
Substantial attention has been paid in recent years to the possibility that unconscious bias among healthcare professionals contributes to health disparities.[58, 59, 60] In its 2003 report, *Unequal Treatment,* the Institute of Medicine concluded that unrecognized bias against members of a social group, such as racial or ethnic minorities, may affect communication or the care offered to those individuals.[58]

In *Studies of Unconscious Bias*, Dr. Lyubansky uses the following to illustrate how unconscious bias may affect the patient-clinician relationship and related processes, "Consider a white male clinician whose implicit bias has been activated by a clinic visit with an elderly African-American patient who is receiving antihypertensive medications but whose blood pressure is uncontrolled. Without realizing that he is being unduly influenced, the clinician perceives the patient as uncooperative and unlikely to adhere to a more intensive drug regimen. The clinician may even erroneously "remember" that this patient can't afford the pharmacy copay. Consequently, although the patient's hypertension is not under control, the clinician decides not to intensify the treatment regimen. This clinician believes that he made the best decision given the situation, unaware that his perceptions were distorted by implicit bias."[57]

Implicit bias cannot be measured accurately with a self-reporting survey tool. Sophisticated computer-based instruments have been developed that rely on differences in response latency to reveal implicit bias. The most commonly used instrument is the Implicit Association Test (IAT) that has been used in hundreds of studies across disciplines.[61, 62, 63] The IAT is designed to detect the strength of a person's automatic association between mental representations of concepts. It functions on the principle that it is easier to make the same response to concepts that are more strongly associated, compared to concepts less strongly associated. Studies have measured implicit bias among clinicians[64, 65, 66, 67, 68, 69] using the IAT. Five of these studies examined racial/ethnic bias, specifically against African Americans as compared to whites. Four of the five studies found evidence for implicit race bias among clinicians.

A number of other studies have shown that people with more implicit ethnic/racial bias have worse interpersonal interactions with minority individuals, often in very subtle ways. In Lyubansky's implicit bias conceptual model (figure 6) he uses the scenario of hypertension control to illustrate the possibility that unconscious bias may affect treatment through its effects on interpersonal communication, as well as affecting clinical decisions directly.

Figure 6: Conceptual model of the influence of implicit bias on hypertension control.



There hasn't been a published study that has examined the relationship between implicit bias and actual medical treatment or outcomes.[57] According to Lyubansky, future research on implicit bias in healthcare must accomplish three goals:

1. Determine the degree of different implicit biases for different groups.
2. Assess the associations among implicit bias and processes and outcomes of care.
3. Test interventions to reduce implicit bias in health care and outcomes, if bias is found to be important in healthcare.

MOBILITY TO ADDRESS DEPRESSION

Scientific studies have shown that physical activity can reduce pain and improve function, mood, and quality of life for adults with arthritis. Research has shown that appropriate physical activity offers substantial benefits to people with arthritis and can decrease arthritis pain and disability. Physical activity can also help manage other chronic conditions that are common among adults with arthritis, such as diabetes, heart disease, and obesity.

Individuals with OA have to take a comprehensive, long-term approach to their health, as symptoms cannot be resolved instantly by taking a "magic pill". In addition to partnership with the care team, the patient's plan for relief from symptoms and the best quality of life with OA should include:[70]

- managing OA symptoms, like pain, stiffness and swelling
- improving joint mobility and flexibility
- maintaining a healthy weight
- fitness and physical activity

Clinicians assist patients with exercises not only to break the vicious cycle of pain and immobility but also to help relieve depression. Cognitive and behavioral therapies teach pain patients how to avoid fearful anticipation, banish discouraging thoughts, and adjust everyday routines to ward off physical and emotional suffering. In addition to these physical activity programs, self-directed physical activity can be beneficial.

The CDC Arthritis Program recommends evidence-based programs that are proven to improve the quality of life of people with arthritis.[71]

Appropriate Physical Activity for Arthritis

- Low-impact aerobic activities including brisk walking, cycling, swimming, water aerobics, gardening, group exercise classes, and dancing.
- Muscle-strengthening exercises including calisthenics, weight training, and working with resistance bands. These can be done at home, in an exercise class, or at a fitness center.
- Balance exercises including walking backwards, standing on one foot, and Tai Chi. For those at risk of falling, balance exercises are included in many group exercise programs.[71]

Arthritis Foundation Exercise Program (AFEP)

Arthritis Foundation Exercise Program (AFEP) is a community-based recreational exercise program developed by the Arthritis Foundation. Trained AFEP instructors cover a variety of range-of-motion and endurance-building activities, relaxation techniques, and health education topics. All of the exercises can be modified to meet participant needs. The program's demonstrated benefits include improved functional ability, decreased depression, and increased confidence in one's ability to exercise.[71]

Active Living Everyday (ALED)
ALED is a group-based program developed at the Cooper Institute that focuses on helping sedentary people become and stay physically active. Participants come together for one-hour, weekly sessions for 12-20 weeks of education and discussion to learn skills (i.e., identifying and overcoming barriers, setting goals, creating an action plan) needed to become more physically active. A variety of moderate and vigorous physical activities are discussed in the program, providing a background for individuals to draw from when setting their personal goals for the type and amount of exercise they want to do. Participants do their actual physical activity outside of the group setting. Facilitators that teach the course are trained and certified.[71]

ENHANCING CULTURAL COMPETENCE IN YOUR PERSONAL PRACTICE

Cultural competence is obtaining cultural information and then applying that knowledge to improve the quality of care and health outcomes for patients. To be culturally competent, HCPs need to first understand their personal views and those of the patient, while avoiding stereotyping and misapplication of clinical knowledge. Meyer describes four major challenges for providers and cultural competency in healthcare.[72]

Awareness. The first challenge is recognizing clinical differences among people of different ethnic and racial groups (e.g., higher risk of pain in African Americans and Hispanic/Latino Americans).

Communication. The second is communication, from the need for interpreters to nuances of word choices in various languages.

Ethics. Healthcare professionals should consider the care choices they make; such as noting if a decision would be different if the patient was another gender or ethnicity.

Respect. Honoring the belief systems of others and understanding the effects of those beliefs on well-being is critically important.

Trust. For some patients, authority figures are immediately mistrusted. Having been victims of trauma or witnesses of such in their homelands, many people are wary of both the caregivers and the care.

Adapting to different cultural beliefs and practices requires flexibility and a respect for others' viewpoints. It requires healthcare professionals to listen to the patient and learn about the patient's personal beliefs about health and illness. A culturally competent clinician can provide the most appropriate care and influence beneficial health behaviors.

Cross, T., Bazron, B., Dennis, K., and Isaacs, M. lists five essential elements that contribute to the ability to become more culturally competent. They include: [73]

1. valuing diversity;
2. having the capacity for cultural self-assessment;
3. being conscious of the dynamics inherent when cultures interact;
4. having institutionalized cultural knowledge; and
5. having developed adaptations of service delivery reflecting an understanding of cultural diversity

The American Psychology Association (APA) similarly delineates culturally competent healthcare providers as having the capacity to:[74]

1. conduct self- reflection and assessment;
2. manage the dynamics of difference;

3. acquire and incorporate cultural knowledge into their interventions and interactions, and to develop multicultural skills;
4. adapt to diversity and to the cultural contexts of their clients, and
5. value diversity

It is important to understand the community demographic and to seek cultural insight through literature and training. Equally critical is being aware of disparities and taking action in individual practice and interaction with patients. The HCP's understanding of their racial/ethnic minority patients can be enhanced through educational programs and the use of tools designed to refine interactions between the HCP and the community that they serve.

Cultural Competence and the HCP/Patient Relationship

Experts on the impact of multiculturalism in psychology, such as Dr. Lillian Comas-Díaz, author of *Multicultural care: A clinician's guide to cultural competence* (2012), teach that cultural competence involves commitment to gaining knowledge and awareness of the patient's perspective enabling the HCP to intellectually empathize and demonstrate cultural sensitivity.[75] In Comas-Diaz's book (Multicultural care, 2012) the explanatory model of distress (EM) is presented as a culturally relevant tool that creates an opportunity for patients to provide personal explanations of their health beliefs to aid HCPs with understanding how they "make sense of their illness and their experiences" to promote a collaborative clinical experience, improve outcomes, and increase patient satisfaction.[75, 76]

The first explanatory model was devised by Dr. Arthur Kleinman and involved asking open-ended questions through an exploratory process. He recommended an approach that answered the questions: [77, 78]

- What do you call the problem?
- What do you think has caused the problem?
- Why do you think it started when it did?
- What do you think the sickness does? How does it work?
- How severe is the sickness? Will it have a long or short course?
- What kind of treatment do you think the patient should receive?
- What are the chief problems the sickness has caused?
- What do you fear most about the sickness?

EMs can be used alone or as a complement to techniques as a means to essentially provide the most appropriate patient education and negotiate a treatment plan that will be acceptable and effective for the patient to follow.

Although the goal is to obtain a transparent view of the patient's reality, it often proves to be a challenging endeavor if the encounter is not approached with authenticity by the HCP. As such, when asking questions the HCP should seek to appreciate the patient's perceptions rather than solely focusing on diagnosis and treatment.[79] To do this Comas-Diaz offers preparing for interactions with multicultural patients by using Pamela Hays's ADDRESSING self-assessment.[75] Hays's ADDRESSING self-assessment is a mnemonic tool for examining one's own biases and influences that include:[80]

- Age and generational influences
- Developmental disabilities
- Disabilities acquired later in life
- Religion and spirituality
- Ethnic and racial identity
- Socioeconomic status
- Sexual orientation

- Indigenous heritage
- National origin
- Gender

SUMMARY

When compared to the general population, arthritis and depression in Hispanic and African American women represent health disparities or preventable differences in health status. The physical limitations, pain, and comorbidities (obesity, cardiovascular disease, diabetes) are more prevalent than would be expected based on statistical findings. This 'disparity' in health is described as a preventable difference. Social disadvantages associated with a lower social-economic status contribute to disparity.

Recognizing the unique musculoskeletal comorbidities seen in African American and Hispanic populations, and taking steps to accommodate cultural factors into patient care may improve their health. Screening for depression when joint pain and physical impairment are evident has been identified as key in addressing the spectrum of these comorbid conditions.

If the healthcare practitioner becomes culturally sensitive, aware of the spectrum and presentation of comorbidities for these subpopulations, and better skilled at diagnosing depression, then patient care may improve. The healthcare practitioner can positively impact the quality of care provided, thus alleviating or "preventing the difference" in health status noted in specific subpopulations.

GLOSSARY

Analgesic	Medication used to achieve relief from pain.
Body Mass Index	A measure of body fat based on height and weight.
Cultural Competency	A set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations.
Depression	A mental health condition with a range of symptoms, from mild to serious, temporary to persistent. Diagnosed by mental health providers based on American Psychiatric Association guidelines. Noteworthy symptoms last over a period of time and include reduced interest in daily activities, change in appetite, fatigue and difficulty concentrating.
Explanatory Model	A tool used to explain how people view their illness in terms of how it happens, what causes it, how it affects them, and what will make them feel better.
Ethnicity	A group of people who identify with each other based on common (shared) ancestral, social, cultural or national experience.
Exacerbation	An increase in the severity of a disease or its signs and symptoms.
Healthcare Disparity	The inequalities that occur in the provision of healthcare and access to healthcare across different racial, ethnic and socioeconomic groups.
Inferential Thinking	Drawing conclusions based on prior knowledge, experience or beliefs.
Institute of Medicine	Provides national advice on issues relating to biomedical science, medicine, and health. It works outside the framework of the U.S. federal government to provide independent guidance and analysis and relies on a volunteer workforce of scientists and other experts, operating under a formal peer review system.
Implicit-association Test (IAT)	The implicit-association test (IAT) is a measure within social psychology designed to detect the strength of a person's automatic association between mental representations of objects (concepts) in memory.
Likert Scale	Psychometric scale commonly involved in research that employs questionnaires. A ratings format for surveys where respondents rank quality from high to low or best to worst using five or seven levels.
Musculoskeletal Conditions	Conditions of the bones, muscles and their attachments (e.g. joints and ligaments) cause from traumatizing the body in either a minute or major way over a period of time.

National Latino and Asian American Study (NLAAS)	A household survey that estimates the prevalence of mental disorders and rates of mental health service utilization by Latinos and Asian Americans in the United States.
Osteoarthritis	The most common form of arthritis that occurs when flexible tissue at the ends of bones wears down.
Psychomotor Activity	Relating to a response involving both motor and psychological components.
U.S. Census Bureau	A principal agency of the U.S. Federal Statistical System responsible for producing data about the American people and economy.

REFERENCES

1. U.S. Department of Health and Human Services. Hispanic/Latino Profile. Office of Minority Health. http://minorityhealth.hhs.gov/omh/browse.aspx?lvl=3&lvlid=64. Published 2013. Accessed February 22, 2015.
2. Smedley BD, Stith AY, and Nelson AR. Unequal treatment: Confronting racial and ethnic disparities in health care. *N Engl J Med*. 2003; 349:1296-129. doi:10.1056.
3. Brault MW, Hootman J, Helmick CG, Theis KA, Armour BS: Prevalence and most common causes of disability among adults—United States. *MMWR*. 2009; 58(16):421-426.
4. Theis KA, Hootman JM, Helmick CG, Murphy L, Bolen J, Langmaid G: Statespecific prevalence of arthritis-attributable work limitation—United States, 2003. *MMWR*. 2007; 56(40):1045-1049.
5. Hootman JM, Helmick CG: Projections of US prevalence of arthritis and associated activity limitations. *Arthritis Rheum*. 2006;54(1):226-229.
6. Lawrence RC, Felson DT, Helmick CG, Arnold LM, Choi H, Deyo RA, Gabriel S, Hirsch R, Hochberg MC, Hunder GG, Jordan JM, Katz JN, Kremers HM, Wolfe F. Estimates of the prevalence of arthritis and other rheumatic conditions in the United States: Part II. Arthritis Rheum. 2008 Jan; 58(1):26-35.
7. Movement is Life. *Addressing Musculoskeletal Health Disparities* [PDF]. USA. 2013.
8. Margaretten ME, Katz P, Schmajuk G, Yelin E. Missed opportunities for depression screening in patients with arthritis in the united states. *J Gen Intern Med*. 2013; 28(12):1637-42. doi: 10.1007/s11606-013-2541-y.
9. Holden K, McGregor B, Thandi P, et.al. Toward culturally centered integrative care for addressing mental health disparities among ethnic minorities. *Psychol Serv*. 2014; 11(4): 357–368. doi: 10.1037/a0038122.
10. Department of Research & Scientific Affairs. Information About Musculoskeletal Conditions. Academy of Orthopaedic Surgeons. http://www.aaos.org/research/stats/patientstats.asp Published 2010. Updated November 2013. Accessed February 23, 2015.
11. Arthritis Research UK. Musculoskeletal. Arthritis Research UK. http://elearning.rcgp.org.uk/course/info.php?id=118 Published February 2013. Accessed February 22, 2015.
12. National Institute of Arthritis and Musculoskeletal Skin Disease. What Is Osteoarthritis. National Institute of Arthritis and Musculoskeletal and Skin Diseases. http://www.niams.nih.gov/health_info/osteoarthritis/osteoarthritis_ff.pdf Published November 2014. Accessed February 22, 2015.
13. National Center for Chronic Disease Prevention and Health Promotion. Arthritis. Centers for Disease Control. Arthritis. http://www.cdc.gov/arthritis/index.htm. Published November 12, 2014. Accessed February 23, 2015.
14. Harris H. Recognizing and managing osteoarthritis. *Nursing 2015*. Lippincott Williams & Wilkins. 2015; (1): 6–42.
15. Arthritis Foundation. Osteoarthritis. Arthritis Foundation. http://www.arthritis.org/about-arthritis/types/osteoarthritis. Accessed February 22, 2015.
16. Centers For Disease Control. *Community Health and Program Services (CHAPS): Health Disparities Among Racial/Ethnic Populations*. Atlanta, GA: U.S. Department of Health and Human Services; 2008.
17. Centers for Disease Control and Prevention. Health Disparities. Centers for Disease Control and Prevention. http://www.cdc.gov/healthyyouth/disparities/ Accessed February 27, 2015.
18. Wright NC, Kershner Riggs G, Lisse J, et al. Self-reported osteoarthritis, ethnicity, body mass index, and other associated risk factors in postmenopausal women: Results from the women's health initiative. *J Am Geriatr Soc*. 2008; 56(9):1736-1743. doi:10.1111/j.1532-5415.2008.01812.x
19. American College of Rheumatology. *Arthritis and Rheumatism* [PDF]. San Diego, CA: American College of Rheumatology. 2013.

20. Reyes-Gibby CC, Aday LA, Todd KH, et al. Pain in aging community-dwelling adults in the united states: non-hispanic whites, non-hispanic blacks, and hispanics. *J Pain*. 2007;8(1):75-84. doi:10.1016/j.jpain.2006.06.002.

21. Mossey JM. Defining racial and ethnic minorities in pain management. *Clin Orthop Relat Res*. 2011;469(7):1859-1870. doi: 10.1007/s11999-011-1770-9.

22. National Institute of Mental Health. What is Depression. National Institute of Mental Health. http://www.nimh.nih.gov/health/topics/depression/index.shtml. Accessed February 26, 2015.

23. Substance Abuse and Mental Health Services Administration. *Results from the 2012 National Survey on Drug Use and Health: Mental Health Findings* [PDF]. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2013.

24. National Institute of Mental Health. Culturally-relevant research provides clues that may help reduce health disparities. National Institute of Mental Health. http://www.nimh.nih.gov/news/science-news/2007/new-insightson-how-mental-health-is-influenced-by-culture-and-immigration-status.shtml Published July 11, 2007. Accessed February 26, 2015.

25. Boyce CA, Fuligni AJ. Issues for Developmental research among racial/ethnic minority and immigrant families. *Res Hum Dev*. 2007;4(1&2):1-17. doi:10.1080/15427600701480972.

26. Akincigil A, Olfson M, Siegel M, et al. Racial and ethnic disparities in depression care in community-dwelling elderly in the united states. *American Journal of Public Health*. 2012;102(2):319-328. doi: 10.2105/AJPH.2011. 300349.

27. Trivedi MH. The link between depression and physical symptoms. *Prim Care Companion J Clin Psychiatry*. 2004; 6(suppl 1): 12–16. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC486942/. Accessed February 23, 2015.

28. Denniger JW, Mahal Y, Merens W, et al. The Relationship Between Somatic Symptoms and Depression [PDF]. Philadelphia, PA. American Psychiatric Association. 2002.

29. Bair MJ, Robinson RL, Katon W, et al. Depression and pain comorbidity: A literature review. *Arch Intern Med.* 2003; 163(20):2433-45.

30. Parmelee PA, Harralson TL, Mcherron JA, et al. Pain, disability, and depression in osteoarthritis effects of race and sex. *J Aging Health.* 2012; 24(1):168-187. doi:10.1177/0898264311410425.

31. Omariba D, Rasugu, W. Neighbourhood characteristics, individual and household attributes and health perception among elderly canadians. *PSC Discussion Papers Series*. 2006; 20(1). http://ir.lib.uwo.ca/pscpapers/vol20/iss1/1. Accessed February 27, 2015.

32. Murphy LB, Sacks JJ, Brady TJ, et al. Anxiety and depression among us adults with arthritis: Prevalence and correlates. *Arthritis Care Res*. 2012; 64(7): 968-76. doi:10.1002/acr.21685.

33. World Health Organization. Zung Depression Scale. World Health Organization. http://www.who.int/substance_abuse/research_tools/zungdepressionscale/en/ . Accessed February 23, 2015.

34. Beck AT, Ward CH, Mendelson M, Mock J, et al. An inventory for measuring depression. *Arch Gen Psychiatry.* 1961;4:561-71.

35. Abela JR, D'Allesandro DU. A test of Beck's cognitive diathesis-stress theory of depression in early adolescents. *J Early Adol.* 2003; 23(4);284-404. doi: 10.1177/0272431603258345.

36. Startup M, Jackson MC, Bendix S. The concurrent validity of the global assessment of functioning (GAF). *Brit J Clin Psychol*. 2002;41:417–422. doi: 10.1348/014466502760387533.

37. Gregoire J, Hambleton RK. Advances in test adaptation research: A special issue. *Int J Testing*. 2009, 9:75-7.

38. Bartram D. The development of international guidelines on test use: the international test commission project. *Int J Testing.* 2001;1(1): 33-53. doi:10.1207/S15327574IJT0101_3.

39. Bartram D. Guidelines for test users: a review of national and international initiatives. *Eur J Psychol Assess.* 2001;17(3):173-186, 173-186. doi: 10.1027/1015-5759.17.3.173.

40. Washington State Department of Health. Behavioral Risk Factor Surveillance System (BRFSS). Washington State Department of Health. http://www.doh.wa.gov/DataandStatisticalReports/DataSystems/BehavioralRiskFactor SurveillanceSystemBRFSS. Accessed March 1, 2015.

41. Rosenberg CE. *The Care of Strangers*. New York, NY: Basic Books; 1987.

42. Newlin K, Knafl K, Melkus GD. African-American spirituality: A process of honoring God, others, and self. *J Holist Nurs. Sci*. 2007;25(1):16–23. doi: 10.1177/0898010106289857.

43. George LK, Ellison CG, Larson DB. Explaining the relationships between religious involvement and health. *Psychol Inquir* . 2002;13(3):190–200. doi:10.1207/S15327965PLI1303_04.

44. Jackson JS, Torres M, Caldwell CH, et al. The national survey of American life: A study of racial, ethnic, and cultural influences on mental disorders and mental health. *Int J Methods Psychiatr Res.* 2002; 13(4):196-207. 2004. doi: 10.1207/S15327965PLI1303_04

45. Ward E, Wiltshire JC. Detry MA, et al. African American men and women's attitude toward mental illness, perceptions of stigma, and preferred coping behaviors. *Nurs Res*. 2013; 62(3):185–194. doi:10.1097/NNR.0b013e31827 bf533.

46. Fernández RL, Das AK, Alfonso C, et al. Depression in U.S. hispanics: diagnostic and management considerations in family practice. *J Am Board Fam Med.* 2005;18(4): 282-296. doi: 10.3122/jabfm.18.4.282.

47. Motel S, Patten E. The 10 Largest Hispanic Origin Groups: Characteristics, Rankings, Top Counties. Pew Research Center. http://www.pewhispanic.org/2012/06/27/the-10-largesthispanic-origin-groups-characteristics-rankings-top-counties/ Published June 27, 2012. Accessed March 3, 2015.

48. U.S. Census Bureau. Income, poverty and health insurance coverage in the United States. U.S. Census Bureau. http://www.census.gov/newsroom/releases/archives/income_wealth/cb10144.html . Published 2009. Accessed February 28, 2015.

49. Betancourt JR, Green AR, Carrillo, JE, et al. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Rep*. 2003;118(4):293–302. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1497553/. Accessed February 27, 2015.

50. Spector RE. *Cultural Diversity in Health and Illness*. 6th ed. Upper Saddle River, N.J.: Pearson Prentice Hall; 2004:253–278.

51. Zoucha R, Purnell LD. *Transcultural Health Care: A Culturally Competent Approach*. 2nd ed. Philadelphia, Pa.: F.A. Davis; 2003:264–278.

52. Shandera WX, Kass JS. Neurocysticercosis: current knowledge and advances. *Curr Neurol Neurosci Rep*. 2006;6(6):453–459. doi: 10.1007/ s11910-006-0046-3.

53. Centers for Disease Control and Prevention. Obesity: Halting the Epidemic by Making Health Easier: At a Glance 2011. Centers for Disease Control and Prevention. http://www.cdc.gov/chronicdisease/resources/publications/aag/obesity.htm. Accessed on February 27, 2015.

54. Mazurek GH, Jereb J, Vernon A, et al. Updated guidelines for using inferon gamma release assays (IGRAs) to detect mycobacterium tuberculosis infection—United States. *MMWR Recomm Rep*. 2010;59(RR-5):1–25. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5905a1.htm. Accessed February 27, 2015.

55. Centers for Disease Control and Prevention. 2011 National Diabetes Fact Sheet: Diagnosed and Undiagnosed Diabetes in the United States, All Ages. Published 2010. http://www.cdc.gov/diabetes/pubs/estimates11.htm#1. Accessed March 2, 2015.

56. Flores G, Abreu M, Schwartz, I, et al. The importance of language and culture in pediatric care: case studies from the Latino community. *J Pediatr*. 2000;137(6):842–848. doi: 10.1067/mpd.2000.109150.

57. Lyubansky , M. Studies of unconscious bias: Racism not always by racists *Psychol Today*. https://www.psychologytoday.com/blog/between-the-lines/201204/studies-unconscious-bias-racism-not-always-racists. Accessed March 1, 2015.

58. Smedley BD, Stith AY, Nelson AR, editors. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. Washington, DC: National Academy Press; 2003.

59. van Ryn M, Fu SS. Paved with good intentions: Do public health and human service providers contribute to racial/ethnic disparities in health. *Am J Public Health*. 2003; 93(s):248–55. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447725/. Accessed March 1, 2015.

60. White AA. *Seeing patients: Unconscious Bias in Health Care*. Cambridge, MA: Harvard University Press; 2011.

61. Nosek BA, Greenwald AG, Banaji MR. The implicit association test at age 7: a methodological and conceptual review. In: Bargh JA, editor. *Automatic Processes in Social Thinking and Behavior*. London, UK: Psychology Press; 2006: 265–92.

62. Greenwald AG, Poehlman TA, Uhlmann EL, et al. Understanding and using the implicit association test: Meta-analysis of predictive validity. *Soc Psychol*. 97(1):17-41. 2009. doi: 10.1037/a0015575.

63. Lane KA, Banaji MR, Nosek BA, Greenwald AG. Understanding and using the implicit association test: IV: What we know (so far) about the method. In: Wittenbrink B, Schwarz N, eds. *Implicit Measures of Attitudes*. New York: Guilford Press; 2007. 59–102.

64. Brener L, von Hippel W, Kippax S. Prejudice among health care workers toward injecting drug users with hepatitis C: does greater contact lead to less prejudice. *Int J Drug Policy*. 2007; 18(5):381–7. doi: 10.1016/j.drugpo.2007. 01.006.

65. Green AR, Carney DR, Pallin DJ, et al. Implicit bias among physicians and its prediction of thrombolysis decisions for black and white patients. *J Gen Intern Med*. 2007; 22(9):1231–8.

66. Penner LA, Dovidio JF, West TV, et al. Aversive racism and medical interactions with black patients: a field study. *J Exp Soc Psychol*. 2010; 46(2):436–40. 2010. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2835170/. Accessed February 27, 2015.

67. Sabin J, Nosek BA, Greenwald A, Rivara FP. Physicians' implicit and explicit attitudes about race by MD race, ethnicity, and gender. *J Health Care Poor Underserved*. 2009; 20(3): 896–913. 2009. doi: 10.1353/hpu.0.0185

68. White-Means S, Zhiyong Dong, Hufstader M, Brown LT. Cultural competency, race, and skin tone bias among pharmacy, nursing, and medical students: implications for addressing health disparities. *Med Care Res Rev*. 2009;66(4):436–5. doi: 10.1177/1077558709333995.

69. Von Hippel W, Brener L, Von Hippel C. Implicit prejudice toward injecting drug users predicts intentions to change jobs among drug and alcohol nurses. *Psychol Sci*. 2008;19(1):7–11. doi: 10.1111/j.1467-9280.2008.02037.

70. Arthritis Foundation. Understanding Arthritis. Arthritis Foundation. http://www.arthritis.org/arthritis-facts/understanding-arthritis.php Accessed March 1, 2015.

71. Centers for Disease Control and Prevention. Intervention Programs. Centers for Disease Control. http://www.cdc.gov/arthritis/interventions.htm. Accessed March 1, 2015.

72. Meyer CR. Medicine's melting pot. *Minn Med.* 1996: 79(5): 5. 1996.

73. Cross T, Bazron, B, Dennis, K, et al. Towards a Culturally Competent System of Care. Volume I. Washington, D.C.: Georgetown University Child Development Center, CASSP Technical Assistance Center. 1989.

74. American Psychology Association. APA Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists. American Psychology Association. http://www.apa.org/pi/oema/resources/policy/multiculturalguidelines.aspx Accessed February 25, 2015.

75. Comas-Díaz, Lillian. *Multicultural Care: A Clinician's Guide to Cultural Competence*. Washington, DC: American Psychological Association; 2012.

76. Kleinman A. *Patients and Healers in the Context of Culture*. Oakland, CA: University of California Press; 1980.

77. Kleinman A. Culture, illness and care: Clinical lessons from anthropologic and cross-cultural research. *Ann Intern Med*. 1976;88(2):251-258.1976. doi:10.7326/0003-4819-88-2-251.

78. Kleinman, A. *Rethinking Psychiatry: from Cultural Category to Personal Experience*. New York, NY: Simon & Schuster; 1988.

79. Bhu K, Rüdell K, Priebe S. Assessing Explanatory models for common mental disorders. *J Clin Psychiatry*. 2006: 67(6): 964-71.

80. Hays, Pamela A. *Addressing Cultural Complexities in Practice: A Framework for Clinicians and Counselors*. Washington, DC: American Psychological Association; 2001.

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