

Travesty of Trust:

A Critical Look at Racial and Ethnic Discrimination in the Healthcare Setting

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Abstract

The purpose of this thesis is to review the overarching purpose of healthcare, examine race-related disparities in minority patient outcomes within specific fields of medical practice, and discuss whether these disparities are the result of racial discrimination within the clinical setting, or are due at least partially to genetic and environmental factors, followed by an examination of how cross-cultural education for healthcare professionals can be improved to equip medical personnel with the attitudes, knowledge, and skills necessary to provide effective care to a culturally diverse patient populace. The benefits of recruiting a culturally and linguistically diverse team of healthcare providers are also discussed. Review of literature seems to indicate that poor patient outcomes for minority groups are due at least in part to forms of discrimination in healthcare provision, and therefore academic initiatives to implement for current and future medical practitioners in order to address current racial disparities and discrimination in healthcare and improve health outcomes for minority patients are also examined.

Travesty of Trust:

A Critical Look at Racial and Ethnic Discrimination in the Healthcare Setting

For thousands of years, physicians and others entering the practice of medicine have received a charge from their teachers and mentors to observe some form of the Hippocratic Oath: to commit to the ethical, honest practice of their art and promise to be ever mindful of their responsibility to practice medicine conscientiously while always acting with the ultimate best interest of the patient in mind (Miles, 2003). While vast increases in medical knowledge and tremendous changes in the development and availability of advanced medical technology have drastically altered the face of modern medicine during the past century alone, the basic principles of the Hippocratic Oath are still as relevant today as they were to the medical students of ancient Greece who solemnly pledged to observe it. Medical practitioners on all levels have a responsibility to their patients to treat each client with respect, compassion, competence, and fairness (Sarraf & Pakpour, 2012).

However, each man or woman who serves as a member of the healthcare team enters the field of medicine already equipped with a unique, personalized set of values and presuppositions, some of which contribute to the effective practice of medicine, and some of which, unfortunately, hinder effective communication between client and caregiver, contribute to ineffective or unjust provision of care (or lack of provision of care), and lead to poor patient outcomes. A growing body of research indicates that negative ideologies and presuppositions regarding races and cultures, when held by physicians or other members of the healthcare provider team, have the potential to create far-reaching adverse effects in the process of disease treatment and prevention amongst

members of minority racial and ethnic groups (Andrulis, 2003). However, in order to address the extensive impact of such ideology and prevent ethnically-driven hypocrisy in the application of the Hippocratic Oath in modern medical practice, healthcare worker awareness of racial biases and discriminatory thinking must be increased, while focused educational efforts designed to improve understanding of the economic, societal, and national health impacts of racial discrimination in healthcare provision should be carefully implemented to supplement existing measures used within healthcare facilities, along with the development and incorporation of nation-wide educational initiatives designed to improve cross-cultural communication between medical personnel and clients from racial or ethnic minority groups.

Healthcare: Its Purpose

In order to more accurately understand the gravity of the problem of race-related inequity in the provision of healthcare and more fully grasp the underlying issues involved in the identification and resolution of this problem, members of the medical field should perhaps take a moment first to reflect upon both the nature and the fundamental purpose of healthcare as a scientific practice. According to the World Health Organization (WHO), as recorded in its first constitution from the early days of the organization, health may be defined as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (WHO, 1947, p. 1). Healthcare, therefore, is a system dedicated to preserving, protecting, and furthering the art and science of preventing and treating disease while simultaneously promoting health and prolonging life through education, preventive care, and organized provision of medical treatment and care for those in states of compromised health (Winslow, 1920).

According to the National Health Council (NHC), provision of quality healthcare is based on a partnership relationship between a coordinated, efficient team of healthcare professionals and patients and families who are informed and respected (Frampton, Gilpin, & Charmel, 2003). Effective health care is patient-centered, and involves seven key dimensions: 1) respect for the values, expressed needs, and preferences of the patient, demonstrated by a willingness to empathically view the situation thru the patient's eyes; 2) integrated and coordinated care utilizing a team approach to medicine to give patients needed support within a variety of different care settings and address both prevention and treatment; 3) education, effective communication, and information designed to support both the patient and the provider; 4) consideration for physical comfort, with attention to system and institutional design and a focus on factors such as pain management protocols and hospital accessibility; 5) emotional support and empathic, holistic practice of evidence-based medicine; 6) appropriate involvement of friends and family; and 7) effective transitions between phases of care and well-designed delivery systems to provide continuity in care during hand-offs between providers of care (Bezold, 2005).

Healthcare Goals

Theoretically, the NHC definition of quality healthcare could seamlessly be integrated into current health practice nationwide. However, real-life practice of medicine sometimes involves complex factors which add to the difficulty of defining the specifics of effective medical practice in actual clinical situations. Clearly understood goals and institutional guidelines can help to improve the consistency of availability of excellent healthcare, however, and in order to aid medical personnel in all areas of practice, the

Institute of Medicine defined the following six general guidelines to consider when providing care:

1. Appropriate healthcare should be safe; medical professionals have an ethical, moral, and legal obligation to avoid inflicting unnecessary injury upon patients through care that is intended to help.
2. Appropriate healthcare should be effective; medical interventions should be based on a scientific knowledge of which patients would be likely to benefit from certain interventions, and which patients would most likely not reap any benefit from the same procedure.
3. Appropriate healthcare should be patient-centered; medical personnel have a responsibility to provide care that respects the individuality, autonomy, preferences, values, and needs of the patient, and clinical decisions should be guided by the patient's values.
4. Appropriate healthcare should be timely; delays and lengthy wait times can cause harm to those receiving care.
5. Appropriate healthcare should be efficient; waste of resources—whether energy, supplies, ideas, or equipment—must be avoided wherever possible.
6. Appropriate healthcare should be equitable; every patient has the right to approach his medical provider without wondering whether he will receive lower quality care because of his gender, socioeconomic status, ethnicity, geographic location, or other personal characteristics (National Academy of Sciences, 2000).

In addition to these six aims, health care professionals should also be striving to think of ways to incorporate preventive health measures into their practice in order to...

Racial Attitudes and Discrimination in the United States

Unfortunately, a growing body of research indicates that for patients from minority ethnic and racial backgrounds, the fear of discrimination from members of the medical community due to phenotypic appearance, cultural background, and socioeconomic status, is a well-grounded concern (Andrulis, 2003). Such discrimination in healthcare is arguably a form of racism. Racism refers to a social system of thinking in which population groups are categorized into races and then ranked preferentially by race, with groups who are viewed as superior receiving a higher percentage of societal resources and goods (Bonilla-Silva, 1996). The concept of *cultural* racism is fundamental to the existence and perpetuation of racism as a belief system, because cultural racism embraces the idea that certain racial groups are inherently or *culturally* superior, which gives rise to social institutions and social norms which support and implement such ideology (Jones, 1997). Within the societal context, racist ideology usually leads to the formation of individually-held negative beliefs and attitudes directed toward racial outsider groups (prejudice), and discrimination occurs when inferior treatment is directed towards members of these outsider groups—both by societal institutions and by individuals within society—as a result of prejudiced ideology. Significantly, due to the fact that racism as an ideology becomes deeply embedded within the institutions and culture of a society, discriminatory behavior often persists thru institutional policies and structures even if individual levels of racial discrimination and prejudice are declining within a society (Williams, 2009).

Terminology

When negative racial stereotypes have become rooted deeply within mainstream culture, this can lead to discriminatory behavior, even from individuals who do not personally embrace racial prejudice. Discrimination, for the purposes of this thesis, refers to differences in level or quality of care resulting from prejudices, stereotypes, and biases in decision-making and clinical communication. Disparities in healthcare refer to differences in the quality of healthcare which cannot be accounted for by differences in access to health or clinical needs or the preferences of the patient. Scientific evidence points to a statistically significant level of racial and ethnic discrimination within multiple contexts of society in the United States, including criminal justice, education, housing, health care, and labor markets (Blank, Dabady, & Citro, 2004; Fix & Struyk, 1993).

While the individuals perpetuating this type of institutional racial bias may be largely unaware of the existence of inequity, those targeted are often times aware of at least a portion of the discriminatory behavior which is directed towards them, and these individualized perceptions of injustice and unfair treatment causes stress (Clark, Anderson, Clark, & Williams, 1999). The role that stress plays in determining health and the role that chronic or acute stress plays when considering social disparities in health amongst various racial and ethnic minority groups are subjects still being studied; more attention will be directed towards this topic at a later point in this paper. For the purpose of this paper, the term racial discrimination includes racial, cultural, and ethnic discrimination. According to the *Encyclopedia of World Poverty*, racial discrimination is “the practice of limiting people’s rights and privileges based on their phenotypic appearance,” but arguably, cultural differences and ethnic norms, in addition to

phenotypic appearance, cause individuals to become the recipient of discriminatory behavior as well (Miller, 2006).

Examples from History

In the history of the United States, there are several notable instances of discriminatory behavior by members of the medical or pharmaceutical community, and these have contributed to a significant widespread distrust towards the U.S. healthcare system amongst members of many minority racial groupings. One of the most publicized and perhaps the most obnoxious examples of racial discrimination in healthcare is the infamous Tuskegee syphilis study: from 1932 to 1972, U.S. Public Health Service (PHS) carried out an experiment using 399 African American men who were in the last stages of syphilis, deliberately allowing the patients to die of the disease so that information could be gathered about the disease process and its effects on the body. Some of the desired information would be gathered through autopsy. The men were not informed of the nature of the study, the specifics of their illness, or the fact that a cure had already been found for the disease from which they were suffering (Scheidegger, 2009).

Recent research indicates that the Tuskegee syphilis studies have resulted in a rift in the trust between black patients and white doctors, which continues to negatively impact patient care, even in the present day (Poythress, Epstein, Stiles, & Edens, 2011). Patients in the Tuskegee study were deliberately led to believe they were receiving treatment for their illness, when in fact medical personnel were deliberately withholding both treatment and information as they gathered data and recorded observations. When embarrassing details about the study leaked to the press in 1972, 40 years after the study began, the study was quickly terminated, but not before numerous victims of the study

had died of the disease, while multiple women had needlessly been allowed to contract syphilis and several children had been born with congenital syphilis, all of which could have been prevented if penicillin had been administered to male members of the community at the time the study began (Andrulis, 2003).

While the healthcare community is still suffering the effects of the damage done to the credibility of the medical community by the Tuskegee study, the study served to highlight a need for regulation and establishment of a more well-defined ethical code by which to practice medicine, and the 1979 Belmont Report, which outlined ethical guidelines and principles to protect human subjects being used in biomedical or behavioral research, as well as the establishment of the Office for Human Research Protections occurred in response to widespread recognition of the problem posed by previous lack of ethical regulation (Katz et al., 2006).

Despite implementation of these measures, more recent cases have given black Americans no less reason to doubt the ethical standards and racial discriminatory tendencies of those within the healthcare field. Although informed consent is now required in all studies which use human subjects within the U.S., regulation of studies performed internationally by U.S. healthcare personnel is not subject to the same degree of scrutiny.

In 1996, Pfizer, an American-based pharmaceutical company, sent three doctors to Kano, Nigeria, to treat children suffering from meningitis with Trovafloxacin (Trovan), an experimental drug which had never been tested with children and which caused severe hepatotoxicity and degenerative bone and joint diseases in animals tested with the drug. After enrolling 200 children in their experiment, the doctors administered

sub-therapeutic doses of Ceftriaxone, a well-established antibiotic treatment for meningitis, to the children in the control group in order to inflate the relative effectiveness of Trovafloxacin. After two weeks, the doctors left Nigeria, and the experiment was ended without follow-up treatment. Ultimately, 11 Nigerian children died and many others were significantly debilitated by the treatment with Trovan, a fact which the Pfizer doctors did not report until the parents of the children who had died during the experiment sued Pfizer in 2002 on the grounds that the experiment had been conducted in violation of international law, since informed consent was never obtained from the parents or the children treated (Patterson, 2010).

While it could be argued that Pfizer's actions have little bearing upon racial discriminatory tendencies within the U.S. because the subjects of the experiment were not U.S. citizens, it should be pointed out that those responsible for designing and carrying out the study were in fact citizens of the United States, and the manner in which Pfizer chose to carry out their study reflected many of the same gross breaches of medical ethics reflected in the Tuskegee syphilis study, since study participants were deprived of both accurate information and appropriate treatment, factors which would have rendered the study design unethical and therefore impracticable if Pfizer had attempted to carry out their research within the United States. The message being sent to minority racial groups, therefore, is that racial discrimination is only unacceptable if the subject has a means of fighting back or bringing unwanted negative publicity to those responsible for exploiting minority racial groups in the name of scientific research. Understandably, this is hardly a reassuring notion to members of minority groups when approaching healthcare professionals in the United States to seek care, and lack of trust between minority groups

and members of the healthcare team continues to be a significant problem in addressing the issue of disparities in patient health and treatment outcomes for patients from minority ethnic categories (Andrulis, 2003).

Racial and Ethnic Disparities: Relationship to Health Status and Healthcare

According to a study done by the National Research Council (NRC), the gap in health between non-minority and minority Americans has persisted and even increased in recent years (NRC, 2003). For example, the average life expectancy for African American men in 1960 was 61 years, while white males at that time were expected to live 67 years; in 1996, the average life expectancy for white males had increased to 74 years, while African-American males can expect to survive an average of 66 years, and American-Indian males have a life expectancy of only 55 years (Collins, Hall, & Neuhaus, 1999).

Potential Confounding Variables

Reasons for the disparities in health between different minority groups and whites are complex, however, because members of racial and ethnic minority groups often have an increased number of individual risk factors which increase their likelihood of developing certain illnesses or conditions. Giving careful consideration to these risk factors when conducting studies is often confounded by the fact that a disproportionately high percentage of minority groups are found in the lowest socioeconomic tiers (NRC, 2003). Additionally, socioeconomic position alone has been found to be correlated to health status, regardless of other individual risk factors: individuals on each tier of the upward socioeconomic ladder tend to experience better health than those on the tier

behind them, even after health risk factors on the individual levels have already been accounted for (Kaplan, Everson, & Lynch, 2000).

Additionally, health risks related to environmental factors, such as air, soil, and water pollution or other physical hazards to health, tend to be more prevalent in communities that are low-income or house a large number of ethnic minorities. Therefore, racial and ethnic disparities in health, healthcare, and health outcomes post-discharge sometimes reflect discrepancies in socioeconomic, behavioral, and social risk factors or differences in living condition environment rather than some form of racial discrimination in health care (House & William, 2000). Healthcare reform, therefore, is a necessary part of addressing ethnic and racial disparities in health, but it is incapable, as an independent factor, to explain or redress all of the differences in health status which exist between minority and non-minority groups (Williams, 1999). In order to address discrepancies in health status more fully, factors such as socioeconomic inequity, poverty in communities of racial and ethnic minorities, and discrimination in housing and educational options, as well as behavioral risk factors on the individual level and differences in access to healthcare and use of services would all have to be thoroughly explored and addressed (Williams, 1999).

Why do Racial and Ethnic Disparities in Healthcare Matter?

As stated above, it would be incorrect to assume that all disparities in healthcare status between non-minority and minority patients result directly from racial discrimination in healthcare. Such is not the case. However, it would likewise be incorrect to assume that none of the differences in health outcomes for minority vs. non-minority patients are correlated to racial discrimination in the practice of healthcare. In

truth, medical personnel have been placed in an awkward position between two goals, which sometimes appear to be in conflict: on one hand they face the societal expectation to follow strict ethical standards in providing service and to provide care with compassion and fairness. On the other hand, medical staff also face the responsibility of managing a limited supply of vital healthcare resources, and at times, decisions made in treatment of patients may result in certain individuals receiving a larger portion of those resources than others, which has the potential to cause healthcare to be unequally distributed across various ethnic groups (NRC, 2003).

All of this occurs within the larger modern context of increasing bureaucratic and financial pressure on the healthcare profession as a whole, which could serve to worsen the problem of racial discrimination in allocation of healthcare resources (NRC, 2003). However, public confidence in health professionals could be irreparably damaged if the healthcare industry begins to engage, even unintentionally, in social triaging—determining eligibility for care based upon one's ethnic background. Trust is already a fragile commodity between the healthcare community and many racial and ethnic minority groups, although history would indicate that this is not without reason, as stated above. This lack of trust becomes a significant issue, however, for the fact that it decreases minority patients' willingness to seek medical attention or adhere to treatment plans following discharge, which leads to increased rates of complications and higher national medical costs for readmission of non-compliant patients who experience relapse or worsening of their condition (Andrulis, 2003).

When considered from a public health standpoint, racial and ethnic discrimination in healthcare often gives rise to significant levels of mistrust and fear of medical

personnel for members of minority groups, which decreases patient compliance with prescribed treatment regimens and impedes progress towards national health goals (NRC, 2003). The United States is increasingly composed of an ethnically diverse group of individuals—a trend which is expected to increase exponentially by the year 2050—and therefore the issue of providing effective healthcare to minority patients is one which the healthcare field cannot afford to ignore or refuse to address (U.S. Bureau of the Census, 2010). As noted earlier, ethnic minority groups tend to experience poorer health overall, with decreased access to care as compared to white Americans, and as a result, the burden of infection and chronic illness experienced by members of minority ethnic groups is disproportionately high. However, this has serious implications for all inhabitants of the United States, since a less healthy nation results in higher national costs for health care and rehabilitation efforts. In light of this reality, the federal *Healthy People 2020* initiative implemented an overarching goal of achieving health equity while eliminating health disparities between racial groups and improving the health of people from every ethnicity (U.S. Department of Health and Human Services, 2012).

Evidence of Healthcare Disparities

The following literature review summarizes several articles taken from peer-reviewed journals published during the past 25 years. When selecting articles for review, studies were selected based on whether or not they were designed to measure ethnic and racial variation in provision of healthcare while also controlling for confounding variables such as access to care (by studying patients with the same insurance status or adjusting for differences in socioeconomic and insurance status). Studies included were not limited to those with positive indications of ethnic and racial biases in care, and

studies conducted to assess differences in care according to the patient's geographic region and socioeconomic status were included if racial or ethnic disparities in care were assessed and access-related factors were controlled for. Review focused most heavily on articles which attempted to control for potential confounding variables such as stage of illness at time of treatment, patient preferences regarding procedure or treatment types, setting in which care was received, procedure availability, intervention suitability, and racial or ethnic variations in the severity of a disease.

Cardiac Care

Strong evidence of ethnic and racial disparities in provision of healthcare is most consistently discovered in studies which document cardiovascular care to ethnic minority groups. In a review carried out in 2000 by the Institute of Medicine's Committee on Quality Care, 100 studies done on cardiovascular care to minority patients were examined, and it was discovered that the bulk of the studies demonstrated statistically significant disparities in provision of cardiovascular care to racial and ethnic minorities, even after potentially confounding variables such as access to care, disease severity, geographic location of care, type of care setting, comorbidities, rates of refusal, and disease prevalence had been adjusted for (NAS, 2000). Two other major review articles reached the same conclusion in their own review of literature (Kressin & Petersen, 2001; Mayberry, Mili, & Ofili, 2000). Studies under review frequently did not specify factors such as disease severity, existence of co-morbid conditions, or illness stage at detection, and many also failed to document whether the patient had refused clinical procedures recommended by physicians; this lack of information serves as a limitation when

interpreting the results of the data reviewed. However, trends in findings became apparent.

For example, in a study performed in 1989 on 4 million patients admitted for myocardial infarction, black men and women were found to undergo coronary artery bypass graft surgery (CABG) much less frequently than white patients, while studies done by McBean et al. and Gornick et al. on Medicare patients found that black individuals were only half as likely to receive cardiovascular procedures as white individuals (Ford et al., 1989; McBean et al., 1994; Gornick et al., 1996). Meanwhile, Allison et al. analyzed data from 4,052 Alabama patients in the acute care setting who were discharged with a diagnosis of anterior myocardial infarction (AMI), and after adjusting for differences in gender, age, illness severity, clinical factors, and characteristics of the hospital, results indicated that thrombolytics were 50% more likely to be administered to white patients than black patients (Allison et al., 1996).

Studies conducted in Veterans Administration (VA) hospitals resulted in mixed findings: Mickelson, Blum, and Geraci (1997) reported no significant discrepancies between minority Hispanic patients and white patients when analyzing rates of administration of cardiovascular procedures after AMI, but several other studies found that black patients at VA hospitals received cardiovascular procedures less frequently, or were offered to white VA patients more frequently than black patients (Peterson et al., 1994; Whittle et al., 1993; Sedlis et al., 1997).

Breast Cancer

Racial disparities or discrimination in the administration of breast cancer treatment cannot be as easily tracked, partially due to the fact that amongst cancer

patients, variations in the degree of disease progression are seldom controlled for and co-morbid factors are less frequently taken into consideration than with cardiac patients. Also, research indicates breast cancer has usually reached more advanced stages prior to diagnosis in minority patients, which further complicates attempts to evaluate differences in the quality of treatment provided to minority and non-minority patients (NRC, 2003).

However, in a 1989 study of 7,781 breast cancer patients receiving treatment in 107 different hospitals, evidence indicated that black women received prognostic testing in the form of progesterone receptor assays less frequently than white patients, did not receive radiation therapy as often following performance of a radical or modified mastectomy, and were significantly less likely to be given supportive rehabilitation following breast removal (Diehr et al., 1989). A second study assessing race-related differences in breast cancer survival rates among 246 white and non-white women who had been treated for breast cancer at three health maintenance organizations showed that black women did not survive as long on average after treatment and white women were more likely to survive than blacks—30% of the black patients died vs. 18% of white patients, while white women averaged 2.77 years of life after treatment, compared to 1.63 years for black women (Howard, Penchansky, & Brown, 1998). However, the same study found no significant racial discrepancies in disease stage at diagnosis, health services used prior to breast cancer diagnosis, or giving of breast examinations.

Asthma

Statistically, African American individuals have higher morbidity and mortality from asthma than white people, although whether this is due to genetic predisposition and biological factors or environmental risks related to living in urban communities with

higher levels of air pollution is not entirely clear (NRC, 2003). Cultural, as well as socioeconomic factors, play into the management of asthma as a disease process. Studies show that black patients typically have more emergency room visits related to asthma exacerbations than their white counterparts, and they are more likely to treat asthma with inhaled bronchodilators rather than inhaled corticosteroids for long-term maintenance, indicating that asthma management for the African American population is focused more on controlling acute symptom flare-ups rather than attempting to manage chronic inflammation of the airway through use of corticosteroids (Zoratti et al., 1998).

Black asthma patients were also more likely to be hospitalized with greater frequency for asthma exacerbations and were less likely to seek treatment from an asthma specialist (Zoratti et al., 1998). Ineffective management of asthma by the African American community may result partially from a lack of adequate patient understanding of proper disease management and partially from inadequate monitoring by physicians. Cultural differences in understanding and priorities may contribute to racial disparities in asthma outcomes as well: a survey of black patients brought to the emergency department for treatment of acute asthma exacerbations revealed that despite having reasonably good access to health care (50% belonged to an HMO, while more than half lived within 10 minutes from a healthcare provider, and 70% reported that they had a regular personal doctor who treated their asthma), most of the patients had asthma that was poorly managed (Blixen et al., 1997). It is unclear, however, whether the historical mistrust of members of the healthcare field by those within the African American community might contribute to lower rates of asthma specialist utilization.

Diabetes

Mortality and burden of illness due to diabetes is 50-100% higher for Native Americans, Hispanics, and blacks than for white patients within the United States, but minority patients appear to do a poorer job of managing their illness, which may account for some of these differences (NRC, 2003). Results from a study of close to 1,400 diabetic Medicare patients indicated that, after accounting for age, education level, and gender, black patients were still more likely to forego glycosylated hemoglobin testing, ophthalmologic visits, lipid testing, and vaccines for influenza than were their white counterparts (Chin, Zhang, & Merrell, 1998). Similarly, the same study indicated that black patients were more likely to visit the emergency department with diabetes-related complications, and they typically had fewer visits to a regular physician for preventive and maintenance care. African Americans also more frequently suffer from the microvascular complications of diabetes, such as end-stage renal disease (ESRD) and amputation of the lower extremities secondary to circulatory insufficiency, although it is unclear whether the higher incidence of lower limb amputations is due to a greater genetic predisposition to diabetes, poor management of the disease process, cultural indifference to disease management at its earliest stages, or negligence or discrimination by the healthcare system itself (Lavery, van Houtum, Ashry, Armstrong, & Pugh, 1999). However, no significant ethnic or racial disparities existed when considering the number of visits to healthcare specialists with relation to diabetic complications, or concerning hypertension screening procedures, foot problems, or diabetic retinopathy (Cowie & Harris, 1997).

Drug Therapy and Pain Management

Underuse of pain medication for minority patients has been documented both in the out-patient and the in-patient settings, as in the 1993 study by Todd, Samaroo, and Hoffman, which found that Hispanic patients admitted to the UCLA emergency department were only half as likely as their white counterparts to receive pain medication, even after other factors such as injury type and physician characteristics had been controlled for. A follow-up study conducted years later revealed that African American patients admitted to the emergency department with long-bone fractures were also less likely than their white counterparts to receive medication for pain (Todd, Deaton, D'Adamo, & Goe, 2000). More recent studies confirm this finding, as a literary meta-analysis conducted in 2012 indicated that blacks, as an ethnic minority group, continue to be routinely under-medicated when receiving analgesic therapy, as compared to their white counterparts (Meghani, Byun, & Gallagher, 2012). However, results are inconsistent when it comes to management of pain across ethnic and racial lines, because another study indicated that post-operatively, black patients received more narcotics for pain management than either Asians or Hispanic patients (Ng, Dimsdale, Rollnik, & Shapiro, 1996).

Additional research in the area of pharmacotherapy and ethnic variations indicates that differences in pharmacotherapy related to racial background exist across several drug classifications, however. In the treatment of dyslipidemia, black men and women were significantly less likely to receive lipid-lowering drugs, while African Americans were also significantly less likely to be prescribed a β -blocker for long-term management of hypertension (Hall-Lipsy & Chisholm-Burns, 2010). The same study indicated black

women with ovarian cancer often experienced a delay before the initiation of chemotherapy treatments, as compared to their white counterparts—a delay which increased overall mortality for black women by up to 13%.

Birth Outcomes

Racial discrimination within a society is a significant source of stress for those on the recipient end. Studies have shown that stress accelerates the cellular aging process, while chronic stress from multiple repeated environmental assaults causes wear and tear to the human body which can eventually lead to dysregulation of its biological systems, leading to chronic illness and premature mortality (Epel et al., 2006; Seeman et al., 2004). Infant mortality rates for black babies in the United States within the first year of life are double the infant mortality rates of white children—a statistic which has been linked, at least in part, to the fact that African American women deliver premature, very low birth weight babies three times more often than white women (Collins, David, Handler, Wall, & Andes, 2004). While it is difficult to prove direct correlations, it has been hypothesized that regular exposure to race-related stress and discrimination could lead to experience of chronic stress, which can lead to development of hypertension, both of which contribute to low birth weight babies and premature delivery, which in turn has the potential to greatly increase infant mortality (Collins, David, Handler, Wall, & Andes, 2004).

Assessing Potential Sources of Disparities in Care

When approaching the concept of healthcare, optimal outcomes require the successful integration of two separate points of view: each patient enters the healthcare setting with a uniquely individualized, culturally determined and socially influenced set

of expectations, needs, and preferences, while care providers likewise bring an individualized set of culturally defined expectations and beliefs, many of which have been created or shaped by experience and professional training. The intertwining of these two viewpoints, as the caretaker endeavors to understand the patient's unique perspective, is necessary for the creation of a strong physician-client relationship within which change can be facilitated (NRC, 2003).

Throughout the process of caring for each patient, however, the caretaker reserves his right to exercise personal discretion in determining what kind of care each individual needs and ought to receive, since multiple diagnostic and treatment options are typically available. Lack of a generalized professional consensus regarding optimal treatments for certain disease processes, variations in clinical practice, and the subjectivity of personal judgment in the clinical setting are variables which lend themselves to possible racial discrimination in healthcare, although these variables do not, in and of themselves, produce disparities in care. However, multiple possible sources of disparity in healthcare exist at the patient level as well as the physician level, since members of ethnic minority groups may perceive and experience disease very differently than non-minority individuals (NRC, 2003).

Possible Sources of Disparity at the Patient Level

For most patients, the type and level of care sought and received is shaped by the values, expectations, hopes, and fears of the patient. In addition to differences in perceptions of treatment goals, a significant percentage of minority patients also experience doubt about the effectiveness of prescribed treatment and are therefore not as willing to accept recommendations from their physician or other healthcare personnel

(NRC, 2003). This reluctance on the part of the patient to accept caregiver recommendations may result in disparities in healthcare, but the ultimate cause for this refusal in care may be rooted in the fact that many racial and ethnic minority groups have a deep-seated mistrust of members of the medical community which springs from historic examples of racial discrimination and personal experience of inferior care for minorities (Byrd & Clayton, 2001).

Patient preference vs. physician discrimination. Bloche (2001) points out that the legacy of doubt regarding the trustworthiness of members of the healthcare community springs from historical instances, such as the Tuskegee study, and continues to cause racial disparities in healthcare today by serving as a deterrent that keeps black Americans from seeking or agreeing to medical attention on a regular basis and thus perpetuates the negative health impact of past racism. Additionally, minority patients who have personally or vicariously had negative experiences with healthcare providers that have demonstrated little empathy for minority patients during encounters in the clinical setting are significantly less likely to prefer vigorous therapy or robust diagnostic procedures, tending instead towards a minimalistic approach to healthcare (Bloche, 2001). While this may appear to be a difference in patient preferences, it is in fact a noticeable response to a subtle form of racism exercised within the clinical setting (NRC, 2003).

Mistrust and refusal of care. Health care behaviors and decisions are influenced by multiple factors, such as culture, environment, resource availability, educational level, and socioeconomic status; however, the decision regarding whether or not to seek health care in the clinical setting has a large psychological component as well, because

utilization of health care is heavily determined by factors such as the individual's interpretation of his symptoms, his beliefs about the severity or degree of his disease, and the benefits of seeking treatment (Bogart, 2001). For example, according to the theory of reasoned action, attitudes and perceived norms play a central role in determining health seeking behavior (Ajzen & Fishbein, 1980), while the health belief model introduces the idea that anticipated benefits and barriers often serve as the determining factor in behavioral changes or continued maintenance of the status quo (Janz & Becker, 1984), and self-efficacy theory emphasizes the importance of the patient's belief in his ability to perform a given behavior (Bandura, 1997).

However, at its core, health seeking behavior, especially in the clinical setting, reflects not only the patient's desire to benefit from seeking treatment, but also his decision to engage in a social interaction with a member of the health care community (Ditto & Hilton, 1990). One cannot examine other factors relating to healthcare provision without also giving consideration to the potential impact this social component of the physician-client relationship plays in determining health outcomes, because if a patient believes his disease condition has reached a critical point, anticipates the benefits of receiving treatment outweigh the benefits of continuing without it, but believes that seeking help might subject him to the condescension of a physician who refuses to sincerely endeavor to understand his problem or limits the patient's treatment options due to his ethnic identity, then the patient may refuse to seek help until the disease has reached a more critical stage, at which point the disease may have progressed to an intractable level (Hobson, 2001).

Within the African American community in particular, prior research indicates that perceived racial favoritism or cultural myopia in the attitudes and communication styles of health care professionals leads to fewer visits to physicians as well as increased levels of patient dissatisfaction with health care (Blendon, Aiken, Freeman, & Cory, 1989; Gornick et al., 1996). Fewer physician visits and negative expectations concerning health care experiences or personal interactions with physicians and other medical personnel, however, often results in patients choosing to delay seeking health care until their condition becomes severe enough to impede function; once a disease has reached this point, treatment requires a substantially greater numbers of medical resources than would have been required if the patient had presented to the physician earlier in the disease process with a minor medical complaint. Additionally, negative expectation and apprehension regarding members of the health care community is not conducive to the development of an effective, therapeutic relationship between the patient and health care professional, and if therapeutic communication has not been established, patients are significantly less likely to implement recommended treatments, interventions, or behavioral changes. Outright refusal of treatment may also result if patients feel ignored, slighted, or disrespected due to their racial or cultural identity (Garcia & Duckett, 2009).

Language barrier. For members of many minority racial populations, obtaining medical care is further complicated by the existence of a language barrier. Within the United States, the Spanish-speaking population is one of the fastest-growing demographics, with trends predicting that Latinos will comprise 25% of the U.S. population by 2050 (Garcia & Duckett, 2009). Unfortunately, employee demographics within healthcare have not kept pace with national demographic trends, and many

healthcare facilities do not offer consistent access to Spanish-speaking healthcare workers capable of facilitating in the provision of culturally-competent medical care (Garcia & Duckett, 2009). Spanish-speaking clients who were interviewed about their own experiences within the U.S. healthcare system following discharge reported that simple aspects of accessing health care, such as scheduling appointments via telephone, speaking with physicians or other medical personnel during office visits, or planning for discharge and follow-up care were often difficult, frustrating, and overwhelming due to the complexity of the health care system as a whole and the lack of medical personnel who spoke Spanish and understood their culture (Garcia & Duckett, 2009). This frustration frequently led to decreased compliance with physician recommendations, fewer follow-up visits, and increased rates of complications secondary to treatment non-compliance (Garcia & Duckett, 2009).

Biological and genetic differences. Race-specific differences in response to pharmacological treatment, possibly related to differences in genetic makeup, race-related alterations in disease pathogenesis, or disparities in environmental factors, such as exercise and dietary habits, may contraindicate implementation of the same therapeutic interventions or drug therapies for minority vs. non-minority patients. For example, black patients suffering from left ventricular dysfunction were significantly less likely to experience beneficial results from enalapril, as compared to white patients treated with the same angiotensin-converting-enzyme inhibitor in a study done in 2001; in this study, white patients experienced a 44% decrease in heart-failure related hospitalizations following treatment, while black patients experienced no notable risk reduction (Exner, Dries, Domanski, & Cohn, 2001). While further research needs to be done in order to

determine racial differences when responding to pharmacologic treatments, it should also be noted that a great number of therapeutic courses have proved to be beneficial for minority patients as well as non-minority clients (NRC, 2003).

However, a higher percentage of disabling and chronic illnesses exist within certain minority groups statistically, perhaps as a result of genetic and environmental factors. Nationally, morbidity and mortality are highest amongst black Americans (roughly 1.6 times that of white patients), which mirrors the ratio from 1950 (William & Rucker, 2000). Mortality and morbidity statistics in part reflect the increased burden of disease that certain ethnic groups experience related to particular causes of mortality. African Americans, Alaskan natives, American Indians, and Hispanics are all disproportionately affected by diabetes; likewise, rates of rectal and colon cancers are highest in Alaskan natives of all ethnic groups within the United States, and Americans from Korean background experience stomach cancer at higher rates than any other ethnic group (Institute of Medicine, 1999).

Possible Sources of Disparity at the Clinical Encounter Level

Organization of the healthcare system. Certain aspects of the healthcare system are very complex, and at times, the manner in which the facility providing care is organized, with relation to financing and accessibility of services, makes it difficult for minority patients, who may face limited language proficiency or an inability to read English, to obtain care. In addition, the time pressure under which physicians routinely operate may hinder accurate client assessments and increase communication barriers already present due to cultural and language differences between physicians and minority patients (NRC, 2003).

While finances and accessing basic care can pose difficulties for minority patients, the situation becomes more complex when referrals are made to seek specialized medical attention. Access to specialty care in the medical field often involves a significant number of steps in order to maneuver through the different levels of bureaucracy commonly found in hospital administration, and, for many ethnic minority groups, this is an overwhelming challenge which they are unable to accomplish, choosing rather to forego specialized treatment (NRC, 2003).

Physician/patient racial concordance. Because health care is a holistic experience which integrates cultural background, societal norms, styles of communication, and social concepts of illness and health, many minority patients in recent studies have indicated their level of satisfaction with the care received in healthcare settings is higher when care is received from a physician or healthcare worker who shares their nationality and culture. For example, African American patients who received care from an African American healthcare professional more frequently rated their visit and their physician as having been excellent, and they were more likely to feel they had been treated with respect, that medical issues had been thoroughly explained, that concerns had been carefully heard, and that care was accessible to them (Saha, Komaromy, Koepsell, & Bindman, 1999). Hispanic patients were less likely to rate their Hispanic physicians as excellent, but satisfaction with overall care increased when patient-physician concordance was incorporated into care (Cooper-Patrick et al., 1999).

Ratings of interpersonal care also varied according to patient-physician racial concordance. African American patients seen in primary care settings rated their visits with white physicians as much less participatory when compared to white patients after

other factors, such as gender and educational status, had been adjusted for, while black patients who interacted with race-concordant physicians were likely to report significantly greater levels of participation (Cooper-Patrick et al., 1999). Greater levels of participation and higher rates of patient satisfaction were positively correlated with increased patient compliance in following prescribed treatment regimens, with increased participation and adherence in making treatment decisions, and higher utilization of preventive care (NRC, 2003).

Need for Cross-Cultural Education

As the racial demographics of the United States population has changed, so also has the need for educational initiatives which reflect these changes. In order for the healthcare field to remain financially stable while still meeting the needs of its diverse patient population in an ethical and effective manner, members of the health provider community need to join with other sectors of society, many of whom are responding proactively to shifts in racial demographics by seeking to improve their understanding of minority cultures in order to improve communication and service to these groups and form partnerships. The challenges posed by the necessity of dealing with an increasingly diverse patient population will not simply resolve themselves or diminish in the future, and in order to adapt, clinicians need to be equipped to understand and graciously work with variations in the ways which certain minority groups recognize symptoms, differences in the threshold at which they will seek care, disparities in level of ability to communicate disease symptoms, variations in certain minority patients' ability to comprehend the management strategy of healthcare facilities and the expectations of care,

and differences in sources of motivation for adherence to preventive and curative measures prescribed by caregivers (Flores, 2000).

Lack of proper cultural understanding in provision of care contributes significantly to racial and ethnic discrimination in healthcare, because differences in social norms, cultural understanding, and societal expectations all differ significantly, and each of these factors heavily impacts communication and influences decision-making in the clinical setting. Additionally, communication between provider and client is a key aspect of the healthcare exchange which largely determines patient satisfaction, which in turn influences patient adherence to treatment regimens, which ultimately determines health outcomes (Stewart et al., 1999). Therefore, cross-cultural education and discovering effective ways in which to bridge the barriers currently posed by differences in cultural understandings and perceptions of healthcare is perhaps one of the most pressing needs within the healthcare field at this time, as a growing body of research indicates that sociocultural differences, if unexplored, misunderstood, unappreciated, and not communicated during clinical encounters, results in high rates of patient dissatisfaction, which leads to poor adherence to treatment regimens, worse health outcomes, and the continuation of ethnic and racial disparities in health care provision (Flores, 2000). Both the culture of the patient and the culture of the provider must be considered in order to avoid stereotyping, which can lead to discriminatory and biased provision of care (Nunez, 2000).

Foundation of Cross-Cultural Education

The definition of culture is widely debated, but the word can conceptually be defined as “an integrated pattern of learned beliefs and behaviors that can be shared

among groups and includes thoughts, styles of communicating, ways of interacting, views on roles and relationships, values, practices, and customs” (NRC, 2003, p. 201).

Sociocultural factors have a huge impact on every aspect of each encounter in the clinical setting, and yet educational curriculum for health professionals has only reflected the importance of cross-cultural understanding to a limited extent (Carrillo, Green, & Betancourt, 1999). In the past, the cross-cultural components of healthcare curricula were designed to increase understanding of ethnicity- and race-specific disease patterns, incorporate ethnopharmacology, and improve health outcomes while approaching each patient encounter with an enhanced awareness of the impact which sociocultural influences have on health behaviors and beliefs so that these factors could be managed within the clinical encounter (Carillo et al., 1999).

The need for cross-cultural education in medicine has been discussed in medical literature since the civil rights movement of the 1960s; however, the practice and implementation of cross-cultural methodologies in practice has only recently begun to gain significant attention (Chin, 2000). During the two decade period between 1980 and 2000, the focus of healthcare literature shifted from discussion of the need for culturally sensitive medical practice to the need for culturally competent care, which was a paradigm more focused on skills (Rios & Simpson, 1998). However, the current diverse state of the U.S. population demands that the question of revising old cross-cultural education approaches and implementing new ones in medical education be given immediate attention (NRC, 2003).

Approaches to Cross-Cultural Education

Cross-cultural medical training incorporates three conceptual models with separate focuses: knowledge, skills, and attitudes (NRC, 2003). All three are necessary in order to create a robust picture which addresses all aspects of the equation when considering the multifaceted issue of treating patients with minority status.

Attitudes—increasing sensitivity: a cultural awareness approach. Cross-cultural care, by its very nature, is heavily dependent on the attitudes and beliefs of the caregiver, and thus a professional approach to caring for minority patients demands cultural sensitivity and awareness of one's own beliefs as well as those of others; each patient interaction must be approached with curiosity, sensitivity, empathy, respect, humility, and an awareness of the influences acting upon that particular patient (Bobo, Womeodu, & Knox, 1991). Curricula which focus on the attitudes of healthcare providers incorporate exercises to encourage self-reflection, thorough understanding of personal culture, one's own biases and tendencies regarding stereotyping, and development of a deep appreciation for diversity in health behaviors, values, and beliefs (Culhane-Pera, Relf, Egil, Baker, & Kassekert, 1997). Training and clinical practice in how to ask open-ended questions, how to have open conversations about the types and effects of discrimination in healthcare, how to identify personal biases and how to appropriately compensate for those biases, as well as how to proactively foresee potential challenges in accessing healthcare for minority patients and making appropriate interventions to address those challenges (Berlin & Fowkes, 1998).

Changing current trends in medical practice involves willingness to work hard and persevere in laboring to change attitudes and modify the biases and racist tendencies

deeply ingrained in culture, and it is an emotionally-charged process which can seem abstract and frustrating to medical professionals-in-training or for those already practicing their art (Kai, Spencer, Wilkes, & Gill, 1999). However, the ability to engage a patient in effective, participatory communication during clinical interactions without communicating condemnation, disapproval, or disrespect is vitally important to improving outcomes for patients from minority communities, which is integral to the achievement of the ultimate goal of decreasing disease burden nationally (Cooper-Patrick et al., 1999).

Knowledge—becoming culturally informed: a categorical approach.

Traditionally, within the academic setting and in the practice setting, the need for cultural competence has focused on providing medical professionals with knowledge regarding the values, beliefs, attitudes, and health behaviors seen within particular minority ethnic groups (Paniagua, 1994). However, trying to simplify complex cultures into a short list of health behaviors, beliefs, and things to do or to avoid in caring for a particular ethnic subset of patients is almost insulting to the true complexity of culture and the individuality of each patient, particularly since outside factors such as socioeconomic status, new ideologies incorporated into old belief systems through acculturation, and the dynamic nature of cultural norms in general makes it impossible to categorize people into stereotypical boxes (Chin, 2000). In fact, research indicates that teaching only knowledge of cultures without an emphasis on practical application of that knowledge to attitude and clinical skillset can actually have a detrimental effect on patient outcomes, because it may lead to stereotyping or increased discriminatory behavior (Shapiro & Lenahan, 1996).

Increased knowledge of cultures and ethnic traditions is beneficial if properly applied, however. For example, in assessing communities and providing primary care, it is helpful for medical professionals to be informed about the ethnic demographics of the community which their clinical practice will service: knowing factors such as socioeconomic status, dietary habits, typical occupations, housing patterns, and traditional healing practices, as well as the prevalence and incidence of certain diseases, can help medical professionals be more accurate and targeted in their provision of care (Nora, Daugherty, Mattis-Peterson, Stevenson, & Goodman, 1994). Additionally, knowledge of disease prevalence within certain ethnic groups, ethnopharmacologic trends, and cultural perceptions of healthcare within a given ethnic minority group can help healthcare professionals personalize and tailor interactions within the clinical setting to meet the needs of a diverse clientele, but caregivers must be mindful of the dynamic nature of culture and be careful not to stereotype. However, the focus of increasing knowledge about particular patient populations should always be to improve delivery of care and enhance patient-caregiver communication on the individual level (Shapiro & Lenahan, 1996).

Skills—enhancing communication: a cross-cultural approach. Providers who implement the cross-cultural approach to medical treatment of ethnic minority patients are taught to approach communication through a framework of specific communication skills designed to increase the caregiver's awareness of key social issues and cultural and health beliefs, while also providing guidelines and methodologies regarding how to deal with and implement information in effective care plans once it has been obtained (Nunez, 2000). Curricula which adopt the cross-cultural approach focus on teaching healthcare

providers methods for obtaining accurate information from patients, discerning patient wants, needs, expectations, and communication styles, as well as identifying decision-making patterns and preferences, the role of the patient's family, and becoming aware of existing issues such as mistrust in the patient-caregiver relationship (Carillo et al, 1999).

Cross-cultural education regarding patient care utilizes an inductive approach and attempts to focus attention on the patient rather than on a broad theory that places the patient in a particular category; the patient himself, therefore, is the starting point as well as the teacher, and the practice style of the provider should be adapted to meet patient-specific needs (Shapiro & Lenahan, 1996).

Other Interventions to Eliminate Racial and Ethnic Disparities in Healthcare

Patient/Physician Concordance

While increasing the effectiveness of cross-cultural education when preparing medical professionals for entry into the healthcare field is an important step in the improvement of healthcare within the United States, recent studies indicate that pairing patients with a physician of their own race or ethnicity can also significantly impact patient outcomes in a favorable way (Chen, Fryer, Phillips, Wilson, & Pathman, 2005). Patients who shared a race-concordant relationship with their physician expressed greater trust in their healthcare provider, were more likely to follow recommendations given, and were more likely to feel that they understood their physician. For nearly a quarter of all African American patients and one third of Latino patients, having a physician who shared their race or ethnicity was strongly preferred (Chen, Fryer, Phillips, Wilson, & Pathman, 2005). However, that still leaves a significant portion of minority patients who do not want or need a physician from the same minority background, and part of

providing effective care for the increasingly-diverse patient population of the United States in the future should potentially involve changing the admission survey at hospitals and other healthcare settings to include questions regarding the patient's preference—or lack thereof—regarding their physician's cultural and lingual background (Chen, Fryer, Phillips, Wilson, & Pathman, 2005). Patient-physician concordance involves more than simply ethnic background, because it encompasses factors such as common language, shared social experiences, and mutual understanding of cultural beliefs, all of which can significantly impact the perception and delivery of healthcare, although pairing minority patients with physicians from the same minority grouping may not always be practical or possible (Chen, Fryer, Phillips, Wilson, & Pathman, 2005).

Language

In addition to the sizeable impact of shared culture on the interactions between patient and healthcare provider within the medical setting, shared language also has a significant impact (Garcia & Duckett, 2009). While translators are available at some hospitals, there are still a significant percentage of minority patients who face formidable linguistic and cultural barriers within the health care system due to lack of translator availability when receiving care and services and a lack of access to personnel who understand their cultural norms (Garcia & Duckett, 2009). With the upward surge in the Spanish-speaking immigrant population within the U.S. in the past five decades, healthcare clinics face a rapidly-increasing need for personnel who are fluent in both English and Spanish, although the influx of other minority groups are increasing the need for translators or bi-lingual personnel across the nation (Garcia & Duckett, 2009). While incorporating new curriculum with an emphasis on culturally competent communication

will help to improve health care provision to a more culturally diverse patient population, the institutions responsible for preparing future medical personnel also need to begin actively recruiting a culturally diverse student body into the healthcare professions if the U.S. healthcare system is to accurately reflect the populations it serves, both through common language and shares beliefs, traditions, and culture (Garcia & Duckett, 2009). Recognition of the need for these types of personnel is the first step in implementing these system-level changes, which will probably be slow in coming (Garcia & Duckett, 2009).

Conclusion

Significant discrepancies in level and types of care provided to patients of differing ethnic and racial backgrounds exist in current medical practice today. These discrepancies in level of treatment are adding to the national burden of disease by contributing to the number of poor patient outcomes through lack of compliance to treatment measures and lack of adherence to preventive care regimens. In order to address the increasingly diverse healthcare needs of the U.S. population, a three-pronged educational approach is needed—one designed to modify deep-seated cultural stereotypes in health care professionals, provide a framework for the ethical practice of care to diverse ethnic groups, and increase effectiveness of patient-caregiver communication for patients from minority groups in order to improve adherence to treatment plans and increase patient willingness to take part in preventive care. A thoughtful combination of the cross-cultural framework, categorical approach, and cultural awareness model are needed both for physicians in current practice in the form of continuing education classes and for new health care professionals just entering the field of medicine, while

consideration should also be given to what measures healthcare institutions can take to actively recruit a culturally and linguistically diverse staff in order to better reflect the cultural and lingual needs of their patient populace.

References

- Andrulis, D.P. (2003). Reducing racial and ethnic disparities in disease management to improve health outcomes. *Disease Management & Health Outcomes, 11*(12), 789-800.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Barksdale, D.J., Farrug, E.R., & Harkness, K. (2009). Racial discrimination and blood pressure: Perceptions, emotions, and behaviors of black American adults. *Issues in Mental Health Nursing, 30*(2), 104-111.
- Berlin, E.A., & Fowkes, W.C. (1998). A teaching framework for cross-cultural health care: Application in family practice. *Western Journal of Medicine, 139*(6), 934-938.
- Bezold, C. (2005). The future of patient-centered care: Scenarios, visions, and audacious goals. *The Journal of Alternative & Complementary Medicine, 11*(1), 77-84.
- Blank, R., Dabady, M., & Citro, C. (2004). *Measuring racial discrimination*. Washington, DC: National Academies Press.
- Blendon, R., Aiken, L., Freeman, H., & Cory, C. (1989). Access to medical care for black and white Americans: A matter of continuing concern. *Journal of American Medical Association, 261*, 278-281.
- Blixen, C.E., Tilley, B., Havstad, S., & Zoratti, E. (1997). Quality of life, medication use, and health care utilization of urban African Americans with asthma treated in emergency departments. *Nursing Research, 46*(6), 338-341.
- Bloche, M.G. (2001). Race and discretion in American medicine. *Yale Journal of Health Policy, Law, and Ethics, 1*, 95-131.

- Bobo, L., Womeodu, R.J., & Knox, A.L. (1991). Principles of intercultural medicine in an internal medicine program. *American Journal of Medical Science*, 302(4), 244-248.
- Bogart, L.M. (2001). Relationship of stereotypic beliefs about physicians to healthcare-relevant behaviors and cognitions among African American women. *Journal of Behavioral Medicine*, 24(6), 573-586.
- Bonilla-Silva, E. (1996). Rethinking racism: Toward a structural interpretation. *American Sociological Review*, 62, 465-480.
- Bowblis, J.R., & Myeong-Su, Y. (2010). Racial and ethnic disparities in the use of drug therapy. *Social Science Research*, 39(4), 674-684.
- Byrd, W.M., & Clayton, L.A. (2001). *An American Health Dilemma, Volume 1, A Medical History of African Americans and the Problem of Race: Beginnings to 1900*. New York: Routledge.
- Campbell, R.T., Li, X., Dolecek, T.A., Barrett, R.E., Weaver, K.E., & Warnecke, R.B. (2009). Economic, racial and ethnic disparities in breast cancer in the US: Towards a more comprehensive model. *Health & Place*, 15(3), 870-879.
- Carillo, J.E., Green, A.R., & Betancourt, J.R. (1999). Cross-cultural primary care: A patient-based approach. *Annals of Internal Medicine*, 130(10), 829-834.
- Cendrowski, D. (2009). International health law violations under the Alien Tort Statute: Federal Appeals Court reinstated lawsuit under the Alien Tort Statute against United States pharmaceutical company Pfizer brought by Nigerian children and their guardians. *American Journal of Law & Medicine*, 35(1), 233-236.
- Chen, F.M., Fryer Jr., G.E., Phillips Jr., R.L., Wilson, E., & Pathman, D.E. (2005).

- Patients' beliefs about racism, preferences for physician race, and satisfaction with care. *Annals of Family Medicine*, 3(2), 138-143.
- Chin, J.L. (2000). Culturally competent health care. *Public Health Reports*, 115, 25-33.
- Chin, M.H., Zhang, J.X., & Merrell, K. (1998). Diabetes in the African-American Medicare population: Morbidity, quality of care, and resource utilization. *Diabetes Care* 21(7), 1090-1095.
- Chou, A., Brown, A., Jensen, R., Shih, S., Pawlson, G., & Scholle, S. (2007). Gender and racial disparities in the management of diabetes mellitus among Medicare patients. *Women's Health Issues*, 17(3), 150-161.
- Clark, R., Anderson, N., Clark, V., & Williams, D. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *The American Psychologist*, 54(10), 805-816.
- Collins, J., David, R., Handler, A., Wall, S., & Andes, S. (2004). Very low birthweight in African American infants: The role of maternal exposure to interpersonal racial discrimination [Electronic version]. *American Journal of Public Health*, 94(12), 2132-2138.
- Collins, K., Hall, A., & Neuhaus, C. (1999). *U.S. minority health: A chartbook*. New York: The Commonwealth Fund.
- Cooper-Patrick, L., Gallo, J.J., Gonzales, J.J., Vu, H.T., Powe, N.R., Nelson, C., & Ford, D.E. (1999) Race, gender, and partnership in the patient-physician relationship. *Journal of the American Medical Association*, 286(6), 583-589.
- Cowie, C.C., & Harris, M.I. (1997). Ambulatory medical care for non-Hispanic whites, African Americans, and Mexican Americans with NIDDM in the U.S. *Diabetes*

Care, 20(2), 142-147.

Culhane-Pera, K.A., Relf, C., Egil, E., Baker, N.J., & Kassekert, R. (1997). A curriculum for multicultural education in family medicine. *Educational Research Methods*, 29, 719-723.

D'Anna, L., Ponce, N., & Siegel, J. (2010). Racial and ethnic health disparities: Evidence of discrimination's effects across the SEP spectrum...socioeconomic position. *Ethnicity & Health*, 15(2), 121-143.

Diehr, P., Yergan, J., Chu, J., Feigl, P., Glaefke, G., Moe, R., Bergner, M., & Rodenbaugh, J. (1989). Treatment modality and quality differences for black and white breast-cancer patients treated in community hospitals. *Medical Care*, 27(10), 942-959.

Ditto, P., & Hilton, J. (1990). Expectancy processes in the health care interaction sequence. *Journal of Social Issues*, 46, 97-124.

Dixon, J., Durrheim, K., Tredoux, C., Tropp, L., Clack, B., & Eaton, L. (2010). A paradox of integration? Interracial contact, prejudice reduction, and perceptions of racial discrimination. *Journal of Social Issues*, 66(2), 401-416.

Donovan, R.J., & Lievers, S. (1993). Using paid advertising to modify racial stereotype beliefs. *Public Opinion Quarterly*, 57(2), 205-218.

Epel, E., Lin, J., Wilhelm, F., Wolkowitz, O., Cawthon, R., Adler, N., et al. (2006). Cell aging in relation to stress arousal and cardiovascular diseases risk factors. *Psychoneuroendocrinology*, 31(3), 277-287.

Exner, D.V., Dries, D.L., Domanski, M.J., & Cohn, J.N. (2001). Lesser response to angiotensin-converting-enzyme inhibitor therapy in black as compared with white

- patients with left ventricular dysfunction. *New England Journal of Medicine*, 344, 1351-1357.
- Ezenwa, M.O., Ameringer, S., Ward, S.E., & Serlin, R.C. (2006). Racial and ethnic disparities in pain management in the United States. *Journal of Nursing Scholarship*, 38(3), 225-233.
- Fix, M., & Struyk, R. (1993). *Clear and convincing evidence: Measurement of discrimination in America*. Washington, DC: Urban Institute Press.
- Flores, G. (2000). Culture and the patient-physician relationship: Achieving cultural competency in health care. *Journal of Pediatrics*, 136, 14-23.
- Ford, E., Cooper, R., Castaner, A., Simmons, B., & Mar, M. (1989). Coronary arteriography and coronary bypass among whites and other racial groups relative to hospital-based incidence rates for coronary artery disease: Findings from NHDS. *American Journal of Public Health*, 79(4), 437-440.
- Frampton, S., Gilpin, L., & Charmel, P. (2003). *Putting patients first: Designing and practicing patient-centered care*. San Francisco, CA: Jossey-Bass.
- Garcia, C., & Duckett, L. (2009). No te entiendo y tú no me entiendes: Language barriers among immigrant Latino adolescents seeking health care. *Journal of Cultural Diversity*, 16(3), 120-126.
- Glymour, M.M., Avendaño, M., Haas, S., & Berkman, L.F. (2008). Lifecourse social conditions and racial disparities in incidence of first stroke. *Annals of Epidemiology*, 18(12), 904-912.
- Gornick, M.E., Egers, P.W., Reilly, T.W., Mentnech, R.M., Fitterman, L.K., Kucken, L.E., & Vladeck, B.C. (1996). Effects of race and income on mortality and use of

- services among Medicare beneficiaries. *New England Journal of Medicine* 335(11), 791–799.
- Guerin, B. (2005). Combating everyday racial discrimination without assuming racists or racism: New intervention ideas from a contextual analysis. *Behavior & Social Issues*, 14(1), 46-70.
- Hall-Lipsy, E.A., & Chisholm-Burns, M.A. (2010). Pharmacotherapeutic disparities: Racial, ethnic, and sex variations in medical treatment. *American Journal of Health-System Pharmacy*, 67(6), 462-468.
- Hausmann, L.R.M., Kwonho, J., Bost, J.E., & Ibrahim, S.A. (2008). Perceived discrimination in health care and use of preventive health services. *Journal of General Internal Medicine*, 23(10), 1679-1684.
- Hobson, W.D. (2001). *Racial discrimination in health care interview project—a special report*. Seattle, WA: Seattle and King County Department of Public Health.
- House, J., & Williams, D. (2000). Understanding and reducing socioeconomic and racial/ethnic disparities in health. In B. Smedley & S. Syme (Eds.), *Promoting Health Intervention Strategies from Social and Behavioral Research*. Washington, DC: National Academy Press.
- Howard, D.L., Penchansky, R., & Brown, M.B. (1998). Disaggregating the effects of race on breast cancer survival. *Family Medicine*, 30(3), 228-235.
- Institute of Medicine (1999). *The Unequal Burden of Cancer: An Assessment of NIH Programs and Research for Minorities and the Medically Underserved*. M. Hanes and B Smedley (Eds.). Washington, DC: National Academy Press.
- Janz, N., & Becker, M. (1984). The health belief model: A decade later. *Health*

Education Quarterly, 11, 1-47.

Jones, J. (1997). *Prejudice and racism*. New York, NY: McGraw-Hill Inc.

Kai, J., Spencer, J., Wilkes, M., & Gill, P. (1999). Learning to value ethnic diversity—what, why and how? *Medical Education*, 33(8), 616-623.

Kaplan, G., Everson, S., & Lynch, J. (2000). The contribution of social and behavioral research to an understanding of the distribution of disease: A multilevel approach. In B. Smedley & S. Syme (Eds.), *Promoting Health Intervention Strategies from Social and Behavioral Research*. Washington, DC: National Academy Press.

Katz, R., Kegeles, S., Kressin, N., Green, B., Wang, M., James, S., Russell, S., & Claudio, C. (2006). The Tuskegee Legacy Project: Willingness of minorities to participate in biomedical research. *Journal of Health Care Poor Underserved*, 17(4), 698-715.

Kressin, N.R., & Petersen, L.A. (2001). Racial differences in the use of invasive cardiovascular procedures: Review of the literature and prescription for future research. *Annals of Internal Medicine*, 135(5), 352–366.

Lavery, L.A., van Houtum, W.H., Ashry, H.R., Armstrong, D.G., & Pugh, J.A. (1999). Diabetes-related lower-extremity amputations disproportionately affect Blacks and Mexican Americans. *Southern Medical Journal*, 92, 593-599.

Lynch, J., Bevan, J., Achter, P., Harris, T., & Condit, C.M. (2008). A preliminary study of how multiple exposures to messages about genetics impact on lay attitudes towards racial and genetic discrimination. *New Genetics & Society*, 27(1), 43-56.

Malat, J., Clark-Hitt, R., Burgess, D.J., Friedemann-Sanchez, G., & Van Ryn, M. (2010). White doctors and nurses on racial inequality in health care in the USA:

- Whiteness and colour-blind racial ideology. *Ethnic & Racial Studies*, 33(8), 1431-1450.
- Mayberry, R.M., Mili, F., & Ofili, E. (2000). Racial and ethnic differences in access to medical care. *Medical Care Research and Review*, 57(1), 108–145.
- McBean, A.M., & Gornick, M.D. (1994). Differences by race in the rates of procedures performed in hospitals for Medicare beneficiaries. *Health Care Financing Review*, 15(4), 77–90.
- Meghani, S.H., Byun, E., & Gallagher, R.M. (2012). Time to take stock: A meta-analysis and systematic review of analgesic treatment disparities for pain in the United States. *Pain Medicine*, 13(2), 150-174.
- Mickelson, J.K., Blum, C.M., & Geraci, J.M. (1997). Acute myocardial infarction: Clinical characteristics, management and outcomes in a metropolitan Veterans Affairs medical center teaching hospital. *Journal of the American College of Cardiology*, 29, 915-925.
- Miles, S. (2003). *The Hippocratic Oath and the ethics of medicine*. New York, NY: Oxford University Press.
- Miller, P.T. (2006). Racial discrimination. In M. Odekon (Ed.), *Encyclopedia of World Poverty* (893-896). Thousand Oaks, CA: Sage Reference.
- Mistry, M., & Latoo, J. (2009). Uncovering the face of racism in the workplace. *British Journal of Medical Practitioners*, 2(2), 20-24.
- National Academy of Sciences (NAS), Committee on Quality of Care in America, Institute of Medicine. (2000). *Crossing the quality chasm*. Washington, DC: National Academy Press.

National Research Council (NRC). Smedley, B., Stith, A., & Nelson, A. (Eds.). (2003).

Unequal treatment: Confronting racial and ethnic disparities in health care.

Washington, DC: The National Academies Press.

Ng, B., Dimsdale, J.E., Rollnik, J.D., & Shapiro, H. (1996). The effect of ethnicity on prescriptions for patient-controlled analgesia for post-operative pain. *Pain*, 66, 9-12.

Nora, L.M., Daugherty, S.R., Mattis-Peterson, A., Stevenson, L., & Goodman, L.J.

(1994). Improving cross-cultural skills of medical students through medical

school-community partnerships. *Western Journal of Medicine*, 161(2), 144-147.

Nunez, A.E. (2000). Transforming cultural competence into cross-cultural efficacy in women's health education. *Academic Medicine* 75, 1071-1080.

Nunez-Smith, M., Curry, L., Berg, D., Krumholz, H., & Bradley, E. (2008). Healthcare workplace conversations on race and the perspectives of physicians of African descent. *Journal of General Internal Medicine*, 23(9), 1471-1476.

Paniagua, F.A. (1994). *Assessing and Treating Culturally Diverse Clients: A Practical Guide*. Thousand Oaks, CA: Sage Publications.

Patterson, P. (2010). Abdullahi v. Pfizer: The Second Circuit expands the scope of customary international law under the Alien Torts Statute. *Tulane Journal of International & Comparative Law*, 18(2), 503-522.

Peterson, E.D., Wright, S.M., Daley, J., & Thibault, G.E. (1994). Racial variation in cardiac procedure use and survival following acute myocardial infarction in the Department of Veterans Affairs. *Journal of the American Medical Association*, 271(15), 1175-1180.

- Poythress, N., Epstein, M., Stiles, P., & Edens, J.F. (2011). Awareness of the Tuskegee syphilis study: Impact on offenders' decisions to decline research participation. *Behavioral Sciences & the Law*, 29(6), 821-828.
- Rios, E.V., & Simpson, C.E. (1998). Curriculum enhancement in medical education: Teaching cultural competence and women's health for a changing society. *Journal of the American Medical Women's Association*, 53(3), 114-120.
- Sarrafi, M., & Pakpour, A.H. (2012). Avicenna's Canon of Medicine: A look at health, public health, and environmental sanitation. *Archives of Iranian Medicine*, 15(12), 785-789.
- Saha, S., Komaromy, M., Koepsell, T.D., & Bindman, A.B. (1999). Patient-physician racial concordance and the perceived quality and use of health care. *Archives of Internal Medicine* 159, 997-1004.
- Scheidegger, A.R. (2009). Tuskegee syphilis study. In H.T. Green and S.L. Gabbidon (Eds.) *Encyclopedia of Race and Crime* (Vol. 2, pp. 817-819). Thousand Oaks, CA: Sage Publications, Inc.
- Sedlis, S.P., Fisher, V.J., Tice, D., Esposito, R., Madmon, L., & Steinberg, E.H. (1997). Racial differences in performance of invasive cardiac procedures in a Department of Veterans Affairs Medical Center. *Journal of Clinical Epidemiology*, 50(8), 899-901.
- Seeman, T., Crimmins, E., Huang, M., Singer, B., Bucur, A., Gruenewald, T., et al. (2004). Cumulative biological risk and socio-economic differences in mortality: MacArthur studies of successful aging. *Social Science & Medicine*, 58, 1985-1997.

- Shapiro, J., & Lenahan, P. (1996). Family medicine in a culturally diverse world: A solution-oriented approach to common cross-cultural problems in medical encounters. *Family Medicine*, 28(4), 249-255.
- Sorkin, D.H., Ngo-Metzger, Q., & Alba, I.D. Racial/ethnic discrimination in health care: Impact on perceived quality of care. *Journal of General Internal Medicine*, 25(5), 390-396.
- Soyer, M. (2008). Factors affecting racial discrimination among college students. *American Sociological Association*, conference papers from 2008 annual meeting, 1-20.
- Stewart, M., Brown, J.B., Boon, H, Galajda, J. Meredith, L., & Sangster, M. (1999). Evidence on patient-doctor communication. *Cancer Prevention and Control*, 3(1), 25-30.
- Sudano, J.J., & Baker, D.W. (2006). Explaining US racial/ethnic disparities in health declines and mortality in late middle age: The roles of socioeconomic status, health behaviors, and health insurance. *Social Science & Medicine*, 62(4), 909-922.
- Todd, K.H., Deaton, C., D'Adamo, A.P., & Goe, L. (2000). Ethnicity and analgesic practice. *Annals of Emergency Medicine*, 35(1), 11-16.
- Todd, K.H., Samaroo, N., & Hoffman, J.R. (1993). Ethnicity as a risk factor for inadequate emergency department analgesia. *Journal of the American Medical Association*, 269, 1538-1539.
- U.S. Bureau of the Census (2010). Available at <http://www.census.gov/2010census/data/>
[Accessed February 5, 2013].

- U.S. Department of Health and Human Services. (2012). Healthy people 2020: The road ahead. Accessed February 5, 2013. Retrieved from <http://www.healthypeople.gov/hp2020/>
- Whittle, J., Conigliaro, J., Good, C.B., & Lofgren, R.P. (1993). Racial differences in the use of invasive cardiovascular procedures in the Department of Veterans Affairs medical system. *The New England Journal of Medicine*, 329(9), 621-627.
- Williams, D.R. (1999). Race, socioeconomic status, and health: The added effects of racism and discrimination. *Annals of the New York Academy of Sciences*, 896, 173-188.
- Williams, D.R., & Mohammed, S.A. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine*, 32(1), 20-47.
- Williams, D.R., & Rucker, T.D. (2000). Understanding and addressing racial disparities in health care. *Health Care Financing Review*, 21(4), 75-90.
- Winslow, C. (1920). The untilled fields of public health. *Science*, 51(1306), 23-33.
- World Health Organization. (1947). *Constitution of the World Health Organization*. Retrieved February 2, 2013, from http://whqlibdoc.who.int/hist/official_records/constitution.pdf
- Zoratti, E.M., Havstad, S., Rodriguez, J., Robens-Paradise, Y., LaFata, J.E., & McCarthy, B. (1998). Health service use by African Americans and Caucasians with asthma in a managed care setting. *American Journal of Respiratory and Critical Care Medicine*, 158, 371-377.