Getting to Equal

Strategies to Understand and Eliminate General and Orthopaedic Healthcare Disparities

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Abstract The 2001 Institute of Medicine report entitled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* pointed out extensive healthcare disparities in the United States even when controlling for disease severity, socioeconomic status, education, and access. The literature identifies several groups of Americans who receive disparate healthcare: ethnic minorities, women, children, the elderly, the handicapped, the poor, prisoners, lesbians, gays, and the transgender population. Disparate healthcare represents an enormous current challenge with substantial moral, ethical, political, public health, public policy, and economic implications, all of which are likely to worsen over the next several decades without immediate and comprehensive action. A review of recent literature reveals over 100 general and specific suggestions and solutions to eliminate healthcare disparities. While healthcare disparities have roots in multiple sources, racial stereotypes and biases remain a major contributing factor and are prototypical of biases based on age, physical handicap, socioeconomic status, religion, sexual orientation or other differences. Given that such

disparities have a strong basis in racial biases, and that the principles of racism are similar to those of other “isms”, we summarize the current state of healthcare disparities, the goals of their eradication, and the various potential solutions from a conceptual model of racism affecting patients (internalized racism), caregivers (personally mediated racism), and society (institutionalized racism).

Introduction

Despite tremendous recent advances in health-related quality of life and life expectancy for the general population, many Americans have not benefited equally. Healthcare disparities—differences in the quality of healthcare attributable to variability in the operation of healthcare systems or to discrimination at the patient-provider level—are realities for many racial and ethnic minorities [61]. Additional groups of Americans who receive disparate healthcare include women, children, the elderly, the handicapped, the poor, prisoners, lesbians, gays, the transgender population, and certain religious groups. The contributions of access-related factors (eg, the relative scarcity of healthcare providers in minority communities, lack of insurance coverage, and insufficient transportation) to inequitable care have been long understood, but the contributions of racial and ethnic discrimination have been explored only recently [61]. Although a substantial majority of Americans believe racial minorities receive the same quality of healthcare as whites [46], the published literature reveals a starkly different reality. Among the noteworthy findings in their 2002 report entitled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, the Institute of Medicine concluded that, even when disease severity, socioeconomic

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status, education, and access are controlled for, racial and ethnic minorities receive lower quality healthcare, including routine services, compared to whites, and these differences are associated with worse clinical outcomes [61]. While chronic conditions such as cardiovascular disease, asthma, diabetes, and cancer remain the major focus of healthcare disparities research and solutions, minority patients also receive inferior orthopaedic care. Such disparities have been demonstrated in access to hip and knee arthroplasty [22, 64], fracture treatment [25], and rehabilitation services after acute hip fracture [31], and although this trend may be improving lately [13, 52], minority patients receive inferior pain management after completely objective conditions such as long-bone fractures [20, 65]. Beyond the human suffering attributable to healthcare disparities, emerging evidence also suggests gaps in care contribute both directly and indirectly in large avoidable healthcare expenditures [43].

In this manuscript, we explore the current state of such disparities (“Where are we now?”), the goals of their eradication (“Where do we need to go?”), and the various potential solutions (“How do we get there?”). While the majority of the current literature in this field focuses on the African American and Hispanic/Latino communities, emerging data suggest that healthcare disparities in these groups are prototypical of those in other minority groups. It is also important to understand that while racial and cultural biases are prototypical sources of healthcare disparities, unequal care is a “human” crisis, affecting a broad spectrum of Americans including those who receive disparate care related to gender, age, socioeconomic status, physical handicap, or sexual orientation.

Where Are We Now? The Patient

A small number of studies suggest racial and ethnic disparities may result, in part, from patient-level factors, including minority patients’ longer delays before seeking care and a greater likelihood to refuse recommended services [10, 29, 55, 60]. However, such differences are small and appear to contribute only minimally to observed disparities [61]. These behaviors and attitudes can develop as a result of mistrust, resignation, helplessness, hopelessness, and other manifestations of internalized racism [33, 37] based upon the patient’s real or perceived mistreatment either within healthcare or in other contexts. Such beliefs may prevail in minority populations even with respect to common and widely accepted orthopaedic treatments. For example, recent studies have revealed, despite similar education, amount of insurance coverage, number of comorbidities, and self-reported degree of osteoarthritis severity, African Americans were nearly 50% less likely

than whites to perceive the benefits of total joint arthroplasty [3, 28] and 70% more likely than whites to recognize barriers to total joint arthroplasty [2]. However, these beliefs are reversible with appropriate educational efforts [72].

Compounding the issue of often inappropriately held beliefs by minority patients is the legitimate uncertainty arising from limited “health literacy” prevalent in minority populations. Health literacy, defined as “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions,” is limited in nearly ½ of all American adults, many of whom deal effectively with other aspects of their lives [51].

Where Are We Now? The Provider

The practice of medicine is fundamentally based upon the ideals of patient sovereignty, professional ethics, and human compassion, but it is naïve to believe medicine is somehow immune to racial bias. Recent studies suggest physicians’ prejudices substantially influence their feelings about patients and their treatment decisions [21, 69]. As a result, such prejudices appear to be major contributing factors to healthcare disparities. While it is reasonable to assume the majority of modern-day healthcare providers consciously disavow prejudice and embrace egalitarian principles, this form of personally mediated racism may exist on a largely unintentional basis and many providers may not even recognize the manifestations of prejudice in their own behaviors [23, 26, 37, 61]. However, while healthcare providers’ interactions with patients may be, in part, rooted in the implicit nature of prejudice and stereotypes, “systemic” factors, including the relative lack of evidence-based treatment guidelines, increasing pressure to make decisions under time constraints, and the relative paucity of cross-cultural training efforts in healthcare education, appear to more strongly influence communication and clinical decision making [61]. For example, while physician preparedness to deliver cross-cultural care has been most strongly correlated with training factors [27, 47], few curricula in undergraduate, graduate, and continuing medical education are focused on understanding and addressing racial and ethnic health disparities. Furthermore, well-accepted guidelines on what and how to teach in this complex area are lacking [63, 75] and many healthcare providers report self-perceived deficiencies in training in this subject [5]. Multiple studies also demonstrate improved communication and greater patient satisfaction in race-concordant patient-provider relationships and imply improved healthcare outcomes compared to race-disconcordant relationships [47, 56, 61]. However,

African American, Latino, and Native American healthcare providers remain notably underrepresented in the United States [4].

Where Are We Now? Society

While the United States has made measurable progress in reducing racial disparities in civil rights, housing, education, and income since 1960, we have not made substantial progress in reducing institutional racism in healthcare [1, 57]. Woolf et al. [76] estimate equalizing the mortality rates between African Americans and whites over the years 1991 to 2000 alone would have averted 888,202 deaths. Our nation's tremendous advances in drug and medical device technologies, in comparison, averted an estimated 176,633 deaths over the same period of time. However, efforts and expenditures for the advancement of medical technologies continue to far outpace those for reduction of healthcare disparities. Hospitalization rates for ambulatory care sensitive conditions remain disproportionately high in African American and Hispanic populations, particularly with respect to asthma, diabetes, and hypertension [43] and other chronic conditions for which the United States spends the majority of its healthcare dollars [32].

Where Do We Need to Go?

If our healthcare system cannot deliver safe, efficient, and equitable care to all Americans now, it is reasonable to conclude, without immediate and sweeping change, we will face public health, public policy, and economic challenges of staggering proportions over the next several decades. The US minority population grew 11 times as rapidly as the white non-Hispanic population between 1980 and 2000. While minorities presently constitute approximately $\frac{1}{3}$ of the US population, the US Census Bureau estimates more than $\frac{1}{2}$ of American children will belong to racial and ethnic minority groups by the year 2023 and men, women, and children of present-day minority groups will comprise the majority of the US population by 2042 [67]. The healthcare system of the 21st century must, therefore, evolve to provide safe, effective, patient-centered, timely, efficient, and equitable care to all Americans as an issue of critical importance to the moral integrity, social stability, and economic viability of our nation [12, 34].

Although the goal to eliminate racial and ethnic disparities outlined in *Healthy People 2010* [68] is laudable as the government's first explicit commitment to achieve healthcare equity in the United States, there has been no apparent overall reduction in the size of disparities between baseline and the most recent data points with respect to

most objectives of the plan, indicating considerable work remains to achieve this goal [1, 40].

How Do We Get There?

The elimination of healthcare disparities is a formidable multifaceted challenge with no single solution, but multiple potential component efforts designed to eliminate both access-related factors and factors born of racial bias. The greatest burden of these efforts lies with healthcare providers, academia, community organizations, payers, and government, with efforts to eliminate both access-related differences and the healthcare consequences of personally mediated and institutionalized biases (Table 1).

Providers must, both individually and through their professional organizations, explore self-awareness, recognize stereotyping, develop skills for cross-cultural communications, and learn to explore patients' views of pain, sickness, and treatment [61]. To this end, for example, the American Board of Internal Medicine has established Standards of Professionalism requiring physicians to "...work actively to eliminate discrimination in healthcare" [49] and the Diversity Advisory Board of the American Academy of Orthopaedic Surgeons has developed comprehensive multimedia training materials, resident education seminars, and continuing medical educational programs to educate its members and to promote diversity and equality of care in orthopaedics [36].

Academic health centers must play a leadership role in researching possible solutions to eliminate disparities [19, 34], educating greater numbers of caregivers from diverse racial and ethnic backgrounds [61, 74, 75], promoting culturally competent care education [6, 7, 63], and positioning the elimination of healthcare disparities among their highest critical missions [9]. For instance, Harvard Medical School has established a Culturally Competent Care Education Committee, which continues to drive key efforts in curriculum and faculty development, and has achieved early successes toward defining sustainable and transferable practices, perspectives, and experiences that will help others institute or continue to develop culturally competent care education-related plans and activities [75].

Community organizations, such as the Chinese community engagement efforts in San Francisco [77] and the South Bronx Community Coalition [16], have tremendous potential to ameliorate healthcare disparities through recruitment of multicultural workforces, promoting accessibility to health resources, combating segregation of services, and integrating culturally competent care resources into the mainstream healthcare system. Corporate "citizens," exemplified by Verizon [35], may also contribute to eradicating disparities by ensuring minority

Table 1. Potential solutions for eliminating healthcare disparities

Solution	Impact	Reference
Improve health literacy	Improved health literacy is an important sustainable factor in improving self-efficacy and positively impacts outcomes	[51, 54]
Increase diversity on clinical teams, including physicians, nurses, allied health care providers, and support staff	Diversity on clinical teams can enhance rapport between patient and physician and can diminish unintentional insults to patients, born of provider ethnic insensitivity	[61, 75]
Eliminate unintentional bias among healthcare providers through training strategies	Unintentional bias can be reduced through training strategies and skills designed to (1) enhance internal motivation to reduce bias, while avoiding external pressure; (2) increase understanding about the psychological basis of bias; (3) enhance providers' confidence in their ability to successfully interact with socially dissimilar patients; (4) enhance emotional regulation skills; and (5) improve the ability to build partnerships with patients	[15, 36, 73]
Improve curricula focused on understanding and addressing racial and ethnic health disparities and develop guidelines on what and how to teach in this complex area	Curricula focused on disparities allow learners to develop a commitment to eliminating inequities in health care through (1) examining and understanding attitudes, such as mistrust, subconscious bias, and stereotyping, which practitioners and patients may bring to clinical encounters; (2) gaining knowledge of the existence and magnitude of health disparities, including the multifactorial causes of health disparities and the many solutions required to diminish or eliminate them; and (3) acquiring the skills to effectively communicate and negotiate across cultures, languages, and literacy levels, including the use of key tools to improve communication	[63, 75]
Establish practical tools and skills that will enable providers to deliver quality and equitable care to patients and to promote adherence during a brief clinical encounter, whatever differences in background may exist	Patient-based approaches to cross-cultural care, such as the ESFT (explanatory/social/fears/treatment) model, consist of (1) assessing core cross-cultural issues; (2) exploring the meaning of the illness to the patient; (3) determining the social context in which the patient lives; and (4) engaging in negotiation with the patient to encourage adherence	[7, 9]
Integrate the concept of cross-cultural care into the large scope of ethics in health care	Weaving the concepts of equitable cross-cultural care into the larger scope of ethics of caring reduces healthcare disparities, particularly when addressing issues that are especially sensitive or important to the patient's health or well-being	[8, 11]
Translate principles and recommendations for reduction of healthcare disparities into specific interventions that providers can use in their own clinical practices	"Blueprints" can assist healthcare providers in translating principles for the elimination of racial and ethnic healthcare disparities into specific actions that are relevant for individual clinical practices	[71]
Expand leadership efforts of academic medicine	Academic medicine must make the elimination of healthcare disparities a critical part of its mission and provide national leadership by identifying quality improvement innovations and creating disparities solutions; examples include collecting and reporting data on patients' race/ethnicity, integrating cross-cultural education into health professions training (eg, the Harvard Medical School Culturally Competent Care Education Committee), promoting diversity in research, recruiting and training greater numbers of minority health professionals and faculty	[9, 73]
Expand culturally competent care education in graduate, postgraduate, and continuing medical education activities	Cross-cultural educational programs such as those established by the American Academy of Orthopaedic Surgeons and Harvard Medical School can facilitate the healthcare professional's exploration of self-awareness and recognition of stereotyping and can aid in the development of skills for cross-cultural communications	[8, 36]
Public health approach	Public health leaders must advocate for public health solutions to eliminate disparities in health	[58]

Table 1. continued

Solution	Impact	Reference
Collect, report, and monitor healthcare disparities data by health plans and government payers	Collection, reporting, and monitoring of patient care data by health plans and federal and state payers should be encouraged as a means to assess progress in eliminating disparities, to evaluate intervention efforts, and to assess potential civil rights violations	[61]
Promote community-based efforts to identify and eliminate the root causes of healthcare disparities in individual communities	Community-based efforts, such as efforts in the San Francisco Chinese community and the South Bronx Health REACH program, can identify and eliminate healthcare disparities at the local level using a multifaceted approach including promotion of (1) universal health insurance coverage (2) culturally competent care for all, (3) an end to segregation in health facilities based on insurance status, (4) accountability for state uncompensated care funds, (5) greater health workforce diversity, (6) an expansion of public health education, and (7) environmental justice	[16, 77]
Leverage government influence to reduce healthcare disparities	Using a quality improvement framework to address racial and ethnic disparities, federal and state governments can, collectively as the largest US healthcare payers, exert policy leverage to demand the reduction of healthcare disparities	[24, 48]
Assess and monitor organizations' cultural care preparedness	The use of scorecards and benchmarking tools such as the Cultural Competency Organizational Assessment-360 are valid and underused means of gauging a healthcare organization's performance in relation to cultural preparedness and initiatives	[44]
Expand mandates for Culturally Competent Care Continuing Medical Education as a condition of professional licensure	Continuing medical education requirements as a condition of professional licensure (such as those now enforced in California and New Jersey and pending in several other states) promote dissemination of culturally competent care educational materials	[36]
Promote Accreditation Council on Graduate Medical Education Core Competencies in residency training	The Accreditation Council on Graduate Medical Education requires as "core competencies" that medical residents must demonstrate sensitivity and responsiveness to the culture, age, gender, and disabilities of patients and fellow healthcare professionals	[53]
Expand and monitor healthcare civil rights enforcement	The unfinished parts of the civil rights-era agenda, the persistence of more subtle forms of segregation, and the failure to assure nondiscriminatory treatment pose major challenges to current efforts to eliminate health care disparities	[61, 62]
Expand the use of qualified interpreters	Linguistic competence, including the availability and quality of interpreter services, impacts healthcare quality	[14, 38, 42]

employees and their families receive access to equitable care.

In 2006, the Disparities Solutions Center convened a multidisciplinary strategy forum of experts who concluded to identify and effectively address racial/ethnic disparities in healthcare, healthcare organizations should employ a multifaceted approach to (1) collect race and ethnicity data on patients or enrollees in a routine and standardized fashion; (2) implement tools to measure and monitor for disparities in care; (3) develop quality improvement strategies to address disparities; (4) secure the support of leadership; (5) use incentives to address disparities; and (6) create a message and communication strategy for these efforts [41]. Such efforts on the part of healthcare systems

may stem not only from growing state and federal mandates to achieve equitable care but also from self-imposed philosophical priorities [30] and their realization of the "good business sense" of responding to the needs of racial and ethnic minority patients [61]. Particularly close attention has been paid to the issue of payors' use of financial incentives to promote quality and equity in care, and while these so called "pay-for-performance" initiatives can increase the quality of healthcare for the services being measured, several reports highlight the potential unintended consequences of pay-for-performance, including the possibility that improperly designed programs might increase, rather than decrease, healthcare disparities [17, 18, 39, 70].

Finally, in addition to the influence they can exert as major payors for healthcare services [24], state and local governments must leverage their administrative, regulatory, and legislative capacities for reduction of healthcare disparities. This can be accomplished by more broadly disseminating legal and regulatory standards for cultural competence [48], public health efforts [58, 59], data collecting and monitoring of changes in healthcare disparities [50, 66], promoting relevant research, and enforcing civil rights laws [62].

Discussion

Medical knowledge and technological advances have grown at a rapid pace, particularly over the last century. While many of these achievements have resulted in substantial improvements in general life expectancy and quality of life, not all Americans have benefited equally [61]. Many groups at times receive disparate healthcare: women, children, the elderly, the handicapped, the poor, prisoners, lesbians, gays, the transgender population, and certain religious groups. Even in the seven years since *Unequal Treatment* [61] highlighted large-scale race- and ethnic-based disparities in healthcare in America and sparked an unprecedented call-to-action for combating such disparities, there is little evidence of extensive progress toward closing the large gaps between life expectancies, health status, and both general and orthopaedic healthcare experienced by white and non-white Americans. In fact, in an examination of 42 measures of healthcare quality and 8 measures of healthcare access, the 2007 National Healthcare Disparities Report (NHDR) cited equivalent or worsening disparities for most measures in African American, Hispanic, Asian and poor populations over the past several years [1].

To the extent that disparate healthcare is attributable to racial and ethnic bias, efforts to eliminate disparities will require ongoing coordinated efforts to address the complex issues affecting patients (internalized racism), caregivers (personally mediated racism), and society (institutionalized racism). However, while stereotypes and racial biases are major contributors to healthcare disparities, it is important to understand that eliminating racism alone will not result in healthcare equality. Although the impacts of bias based on age, sex, religion, sexual orientation, handicaps, and economic status have been less-well studied, it is also unlikely that eliminating these forms of discrimination alone will result in healthcare equality. It is clear, alternatively, that there is a need for long-range coordination of multifaceted efforts to address the so-called “triple whammy” confronting many American minority communities: (1) disproportionately poor access to healthcare; (2)

poorer quality healthcare when care is available; and (3) the complex adverse social and economic conditions often affecting their communities [45].

Patient-based factors can be addressed by improvements in patient education programs aimed at increasing patient knowledge on how to access care, actively participate in medical decision making, and follow through on medical treatment plans. Providers, hospitals, payors and regulators will contribute to the elimination of healthcare disparities through improvements in both cultural “sensitivity”—the capacity to recognize that differences exist and the willingness to adapt behaviors—and cultural “competency”—the tools necessary to carry out plans, policies and practices to respond to such differences. Ideally, cultural “proficiency” in healthcare will achieve the same attention that knowledge and technical proficiency have in our quest for quality, affordable, accessible and equitable care.

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