HEALTH DISPARITIES: GAPS IN ACCESS, QUALITY AND AFFORDABILITY OF MEDICAL CARE

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ABSTRACT

Health disparities, which are sometimes referred to as health inequities, have garnered an increasing amount of attention from physicians and health policy experts, as well as a renewed focus from federal health agencies. As a complex and multi-factorial construct, differential access to medical care, treatment modalities, and disparate outcomes among various racial and ethnic groups has been validated in numerous studies. The antecedents of such differences involve such "drivers" as cost and access to the healthcare system, primary care physicians, and preventive health services. In addition, the subtle role of bias in creating and/or exacerbating health disparities is well documented in the literature. This article highlights the dimensions and extent of health inequities and emphasizes the challenges facing physicians and others in addressing them.

THE SIGNIFICANCE OF RACIAL AND ETHNIC DISPARITIES IN HEALTHCARE

Racial and ethnic disparities in healthcare are important for a number of reasons. They pose significant moral and ethical dilemmas for the US healthcare system. As a nation, we have an abundance of healthcare facilities, cutting edge technologies, and pharmacotherapeutics and other assets that are the envy of the world, but which are not accessible for a myriad of reasons to all segments of the population. Also, healthcare as a resource is tied to various notions of social justice, opportunity, and quality of life for our patients, our communities, and the nation at large. A closely allied concern is the nation's economic well-being, which is both directly and indirectly tied to the health status of our population in general, and of specific population groups in particular. As a result, inadequate, inaccessible, and/or poor medical care further exacerbates increasing healthcare costs that have broad

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implications for the overall quality of care experienced by all Americans.

Evidence garnered over the past 3 to 4 decades is compelling. Health and disease states are unevenly visited upon various population groups. A few examples are illustrative: infant mortality for black babies remains nearly 2.5 times higher than for white babies; the life expectancy for black men and women remains at nearly 1 decade fewer years of life compared with their white counterparts; diabetes rates are more than 30% higher among Native Americans and Latinos than among whites; rates of death attributable to heart disease, stroke, and prostate and breast cancers remain much higher in black populations, and minorities remain grossly under-represented in the health profession's workforce relative to their proportions in the population.

HEALTH DISPARITIES DEFINED

Health disparities are differences and/or gaps in the quality of health and healthcare across racial, ethnic, and socio-economic groups. It can also be understood as population-specific differences in the presence of disease, health outcomes, or access to healthcare. Another useful definition has been provided by the Institute of Medicine that suggests that health disparities are racial or ethnic differences in the quality of healthcare that are not due to access-related factors or clinical needs, preferences, and appropriateness of intervention. Despite the usefulness of these definitions, it is important to understand that health disparities are not just based on race, ethnic, and cultural differences within the population. Lifestyle choices, age, sexual orientation, lack of access, and personal, socio-economic, and environmental characteristics are also to be included.

THE LANDMARK MALONE-HECKLER REPORT

The emergence of greater awareness and focus on health disparities has its genesis in the 1985 landmark Report of the Secretary's Task Force on Black & Minority Health issued by then US Health and Human Services Secretary, Margaret M. Heckler (1). The poor health status, poor outcomes, and constricted access to medical care for more than 300 years, anecdotally well known by many African Americans, and in some cases by a small cohort of academicians and public health officials, gained greater awareness with the "Heckler Report." The report objectively detailed the wide disparity in the excess burden of death and illness experienced by blacks and other minority Americans as compared with the nation's population as a whole. It also put forth

that such disparities had been in existence for as long as federal health statistics were routinely collected. The report further emphasized the fact that six medical conditions between blacks and whites accounted for 86% of excess black mortality and the fact that close to 45% of deaths up to the age of 70 years (58,000 of 138,000) in the black population would have been avoidable if better evaluation, detection, and treatment had been available. The six conditions were: cancer (3.8%), heart disease and stroke (14.4%), diabetes (1.0%), infant mortality (26.9%), cirrhosis (4.9%), and homicide and accidents (35.1%).

UNEQUAL TREATMENT: CONFRONTING RACIAL AND ETHNIC DISPARITIES IN HEALTHCARE

Although generally well received, the impressive work and initial analysis detailed in the Heckler-Malone Report was not followed up until 2003 when the Institute of Medicine published its groundbreaking report "Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare" (2). This IOM analysis began with a simple approach to rigorously review the 600 or so articles published in the medical literature over the prior 3 decades that addressed racial and ethnic disparities in healthcare. As part of this analysis, there was a specific focus on the 100 highest-quality studies covering cancer, cerebrovascular disease, renal transplantation, HIV/AIDS, asthma, diabetes, analgesia, and cardiovascular care. The IOM analysis revealed even more objective evidence of major differences and raised the specter of the role of bias and discrimination with regard to populations with equal access to healthcare. Underscoring the resultant discrepant quality of care experienced by populations as manifested in the appropriateness of clinical care and patient preferences, and the often confusing and challenging nature of the healthcare system and its legal and regulatory environment, are the roles of bias, discrimination, and uncertainty. The IOM report contributed further to a more robust dialogue on health disparities by offering an integrated model of health disparities that places in context the complex and multifactorial etiology for disparate treatment decisions and outcomes (Figure 1).

DISPARITIES IN CARDIOVASCULAR CARE

Subsequent to the release of "Unequal Treatment," there was understandable skepticism by many in the House of Medicine that such disparities existed at all—and that, in part, they could be caused by disparate treatment decisions based on ethnic, racial, and/or cultural differences. The American College of Cardiology and the Henry J.

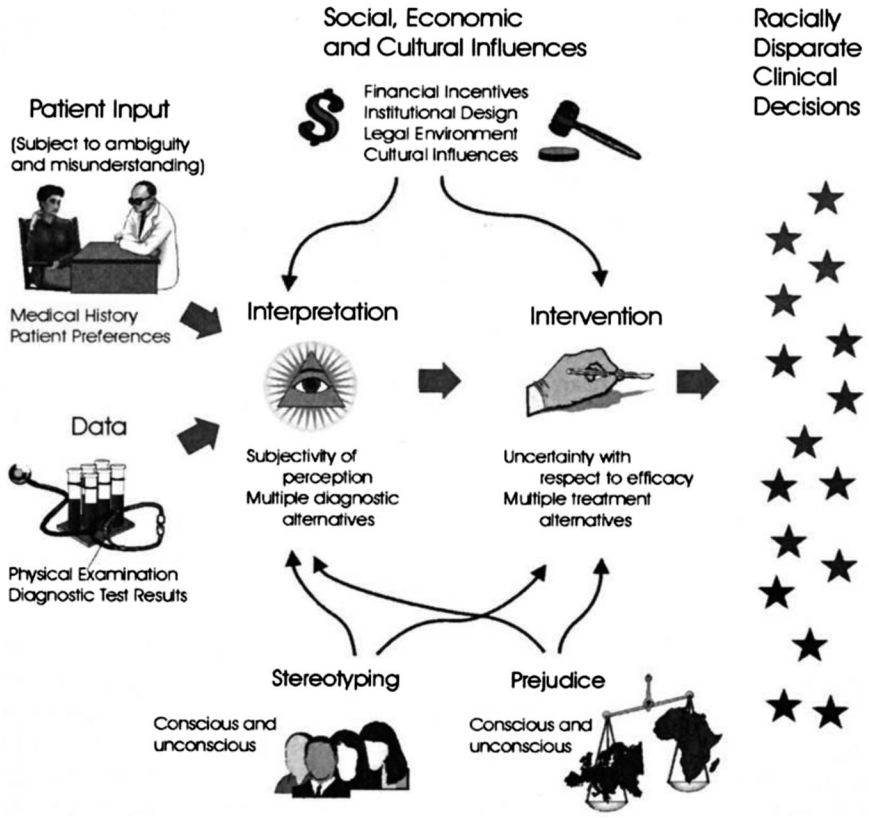

FIG. 1. Integrated model of health disparities from the Institute of Medicine (IOM).

Kaiser Family Foundation jointly undertook an analysis of the cardiology services. After an extensive review (3) of 81 of 158 studies on the topic, they that affirmed that there was credible evidence that African Americans were less likely than whites to receive diagnostic and revascularization procedures and thrombolytic therapy even when patient characteristics were similar. Among the key studies included was the work of Whittle et al (4). In a retrospective study of cardiovascular procedures among black and white veterans, Whittle et al found that there was a clear discrepancy in cardiac catheterization rates, angioplasty, and coronary artery colon bypass grafting absent financial barriers: Blacks were less likely to undergo invasive cardiac procedures in the Veterans healthcare system. Another study by Schulman et al (5) also found racial and sex differences in recommendations for cardiac catherization, and Chen et al (6) showed similar differences in the utilization of catherization after acute myocardial infarction.

DISPARITIES IN COST AND AFFORDABILITY

A plethora of data further emphasizes a major contributor to the problem of health disparities: the cost and access to many Americans for obtaining the medical care they require. Clear disparities exist in rates of health insurance coverage among black and Latino population groups. The consequences of being uninsured are significant and include use of fewer preventive services, poorer health outcomes, higher mortality and disability rates, lower annual earnings because of sickness and disease, and the advanced stage of illness (i.e., many are "sicker" when diagnosed). Thus, the uninsured tend to be disproportionately poor, young, and from racial and/or ethnic minority groups. An analysis by the Joint Center for Political and Economic Studies and Johns Hopkins University explored the economic burden of health inequalities in the United States and revealed that there is a significant financial burden (7). The elimination of health inequalies for minorities would have reduced total costs by approximately $1.5 trillion over a 3-year period.

THE CHALLENGES AHEAD

In the 27 years since the release of the Heckler Report, significant strides have been made in addressing health disparities. The report served as a catalyst for the coordination of federal and state responses to address disparities and the establishment of the Office of Minority Health within the US Department of Health and Human Services. However, despite such progress, it is clear that much work remains to be done to fully address health inequities. As documented by Benz et al (8), overall awareness of ethnic and health disparities remains somewhat disappointing, particularly in racial and ethnic groups, about certain disease conditions such as HIV/AIDS. In addition, although medical education has made perceptible progress in what is commonly referred to as cultural competency training for students, trainees, and physicians in general, recent evidence emphasized by Haider et al (9) reveal worrisome implicit preferences for whites and upper-class patients in implicit association testing instruments. Furthermore, in the emerging era of health reform, cost-conscious care and pay-for-performance reimbursement schemes for hospitals and physicians, recent evidence by Jha et al (10) emphasizes the challenge in even more stark terms: Lower performing hospitals, as manifested by quality performance data and metrics, tend to treat higher percentages of minority patients and have higher overall costs. Failure to address these disparities will only serve to worsen pre-existing disparities in access,

quality, and costs of medical care for the most our most vulnerable populations. Indeed, much work remains.

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DISCUSSION

M. Gershon, New York: To what extent in the data that you've shown have the studies controlled for poverty? I think it was George Bernard Shaw who said that poverty is the greatest sin that humans can commit because no other sin is punished as severely. The point being that racial minorities tend to have a low socio-economic status, and, as you've shown in the Johns Hopkins report, those students had a preference not just for not dealing with racial minorities but low socio-economic minorities. Is it poverty that's the problem?

Riley, Nashville: Absolutely, a significant contributor. We know that low socio-economic status is a huge social determinant of health. We see it in many communities in terms of simple things, in terms of just access to fresh fruits and vegetables — so, it has a tremendous collateral benefit to overall health over time. Obviously, the economic aspects of this country, particularly in light of what we are going through now, exacerbates that, as I think you are pointing out, disparities are going to be with us for a long while. So I think you're dead on target.

M. Gershon, New York: It's not just nutritional point of view, if you compare

education, and I'm talking about early education, not Johns Hopkins. I'm talking now about earlier education. Very few people in low socio-economic groups have access to the kind of enrichment that the higher socio-economic groups do that are routine. Training kids, pushing kids, pre-K, it's just not coming and so these kids go to class 2 to 3 years behind, and when they get into kindergarten, they don't know how to go to class. They are not socialized yet and that disparity carries with them throughout the educational system. So, the country needs to address it, but not just changing attitudes in medical school. This is a major problem that requires massive political action, which is not coming at the moment.

Riley, Nashville: I agree with you 100%, and Jordy Cohen and I were just at NIH last week. We were both appointed by Frances Collins to the Blue Ribbon panel looking at the disparity in RO-1 grants among investigators, and Jordy will tell you, we've had 2-hour, vigorous debates about where do we look first. You know the educational system is a problem, and we know that that contributes to the downstream lack of enough healthcare professionals for minority communities. So, it is a complex "nubby" problem that has many dimensions, which you've nicely articulated.

Alexander, Atlanta: I congratulate you on an absolutely terrific presentation. You are addressing one of the most important issues that we have as a nation. My questions were in the same context as were just asked and I think all of us realize that whatever our deficiencies are in the healthcare system and the way people are treated, that the saying that we kick around, I guess everyone is, "Tell me something about your zip code and I'll tell you something about your health. . . " Are there data on US populations comparing the kinds of outcomes that you've suggested that are based on socio-economic status (SES) or some measure of SES, and how do you teach?

Riley, Nashville: Yes. Actually, Rand has done some great work in looking at zip codes and analyses and looking at health indices. Excellent work. I can't remember the investigator with Rand who's done that, Dr. Alexander, but again, that punctuates that socio-economics is a huge contributor to health disparities, and we would never minimize that. You know my counter to that is that as physicians and as medical educators that is a situation we are going to be ill-equipped to change in of itself, and again, I have a slightly more polemical version of this talk, which I dub the "Pox in the House of Medicine," where I think it's really incumbent upon those of us who are in the medical institutions to do really as much as we can while we work towards getting more rigorous data, more expansive data on many of these aspects. I think Henry Bodenheimer gave a great talk yesterday about transplantation and we had an offline conversation about wouldn't it be great to compare his New York data to the Atlanta data and to see what happens in terms of the differences just geographically and culturally, South versus North or West versus East. So, I think you're dead on target.

Ludmerer, St. Louis: A comment that might be pertinent: Certainly these issues, as I believe Dr. Gershon pointed out, are very broad and complex. It was Rudolph Virchow who pointed out that the health of the nation is a reflection of how healthy that nation is as a society. So, there are many factors that go into those issues of health disparities, but I think the message that I hear you saying, and I would concur with, is that it does not excuse us as physicians from doing what we can and what we are capable of and what is within our own house. This is a difficult message for many physicians to receive, I believe, because most physicians have big caring hearts and they want to do the right thing and take care of people and help people. And the idea that they may not be fully helping people kind of goes against the core. And I think what this points out too, in my mind, is the importance of the subtle disparities that come out. It's not the overt decisions that are made but many of the subtle decisions that are made by prejudice, by ignorance, by just not having the right cultural understanding. There is a wonderful

historical example that illustrates this in the early days of anesthesia: Anesthesia was demonstrated at the Massachusetts General Hospital in 1846, but it took a generation or so for anesthesia to come into accepted common standard use in surgery because there were many legitimate concerns in the signs of the time as to what the anesthesia might be doing to the physiology of the body, and if there was some late price to pay for the benefit of having painless surgery. But what's interesting is studying who received and who did not receive anesthesia during those 20 or 30 years. And this has been thoroughly studied in a quantitative fashion in a book by Martin Pernick at Michigan. What he found was that the African Americans, the Native Americans, and so forth received anesthesia much less commonly than did Caucasians. And the wealthier you were, the more likely you were to get it. And this was rationalized because, after all, we don't know what this anesthesia is doing to the physiology of the body, but the slaves, they're tough. You know, we don't need to worry about them, but these fragile Caucasian ladies, you know, they are very labile and very emotional and their physiology really might be messed up by the pain, so we'll give it to them — but it's this type of subtle disparity, I think, that we have a great deal of control over physicians if we are educated about it and we look internally.

Riley, Nashville: Absolutely. Ken you are right. The modern day manifestation of that is that I could have presented strong data that shows that African Americans that present to emergency rooms are not given analgesia at the same rates as other populations because of the hunch or the fear or the unconscious bias that they may be drug-seeking or not worthy of expensive analgesia. So, that's the modern day manifestation of what you have just articulated, Ken, and you are the world's most foremost medical historian, so I appreciate your point. Thank you.

Wilson, Baltimore: I think that the comments that have been made about poverty, education are absolutely correct, but I want to remind you that there are multiple studies that show that when poverty is controlled for and education is controlled for they show gross disparities in healthcare based along ethnic and racial groups.

Riley, Nashville: Point well-taken. Dean Wilson has reminded us again, which is one of my basic contentions when I give this talk, is we have work to do, colleagues, as physicians in the "house of medicine," and I think Don has articulated it very well.