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Genes, Race, and Culture in Clinical Care:

Racial Profiling in the Management of Chronic Illness

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Abstract

Race, although an unscientific concept, remains prominent in health research and clinical guidelines, and is routinely invoked in clinical practice. In interviews with 58 primary care clinicians we explored how they understand and apply concepts of racial difference. We found wide agreement that race is important to consider in clinical care. They explained the effect of race on health, drawing on common assumptions about the biological, class, and cultural characteristics of racial minorities. They identified specific race-based clinical strategies for only a handful of conditions and were inconsistent in the details of what they said should be done for minority patients. We conclude that using race in clinical medicine promotes and maintains the illusion of inherent racial differences and may result in minority patients receiving care aimed at presumed racial group characteristics, rather than care selected as specifically appropriate for them as individuals. [race and genetics, primary care, health disparities, racial profiling]

Although it is well known that human populations do not constitute biologically distinct racial groups (AAA 1998; Goodman 2000; Lewontin 1972), race remains a central social construct in our society, structuring observations of superficial traits like skin color and hair texture into a wide array of inferences about biology, social class, behaviors, and beliefs, depending on who is interpreting the concept and for what purpose (Rattansi 2007). Despite perennial discrediting of the scientific validity of biological race, race also retains an important place in the health sciences.

A great deal of contemporary epidemiological and medical research is framed in terms of presumed genetic, socioeconomic, and cultural characteristics of racial and ethnic minority groups (Acquaviva and Mintz 2010; Gravlee 2009; Nawaz and Brett 2009; Witzig 1996). Shim (2005) has argued that multifactorial models in health research as a matter of course treat race as a “black box,” never really exploring how exactly race impacts health. She points out that because such practices invoke widely held notions of difference, they appear to be logical and incontestable, “imparting an aura of rationality on what are thoroughly social and ultimately hierarchical discourses, institutions and practices” (133). What results

from the frequent and uncritical use of race in health research is the appearance that there is a growing body of scientific evidence for the importance of considering race in providing health care. In the interest of reducing health disparities, or providing individual patients with the most appropriate care, popular notions of racial/ethnic traits are routinely applied in medical decision making, resulting in differential treatment in medicine (Kaufman and Cooper 2010; Ostchega et al. 2008).

There are many critics and many supporters of the practice of racialized medicine. Some argue that taking race/ethnicity into consideration is clinically useful and can provide convenient insight into a patients' genetic heritage, behavioral habits, and socioeconomic status (Chin and Humikowski 2002; Nawaz and Brett 2009; Satel 2002; Wolinsky 2011). Others argue that such practices are not scientifically defensible and may increase disparities by promoting stereotyping (Acquaviva and Mintz 2010; Brower 2002; Ellison et al. 1997; Ncayiyana 2007; Schwartz 2001; Shields, et al. 2005). Despite this debate, little is known about the specific ways that race is actually understood and applied by practicing clinicians. In this article, we first review some recent trends in health research that promote the idea that race is important to medical care, then we examine how a group of primary care clinicians invoke the concept in their everyday practice. We argue that, despite the prominence of the idea that race is clinically important, race constitutes a vague, unscientific, and insidious concept, whose use in clinical care results in essentializing racially marked patients. We found that when clinicians use such a concept in clinical care, they replace individual histories with "commonsense" notions of racial group characteristics. The end result is that minority patients may receive racialized care, rather than care designed to be specifically appropriate for them as individuals.

Race, Genetics, and Health Disparities

Clinicians are regularly told, in published research reports, medical training, and clinical guidelines, that race is clinically relevant. However, due to the arbitrariness of racial categories themselves, the presumed scientific basis of these claims is inherently questionable. Racial categories make poor scientific variables because they are based on poorly defined overlapping categories without clear principles for their application (Hunt and Megyesi 2008). Still, racial/ethnic identifiers are routinely used across disciplines in health research. For example, in the cutting-edge field of medical genetics, genetic association studies regularly report frequencies using common racial/ethnic labels: Europeans, Asians, Africans, and Native Americans (Kahn 2009). Furthermore, emerging FDA drug labeling practices, which already include specific genetic recommendations on the labeling of at least 200 drugs (Ginsburg and Willard 2009), often recommend targeting genetic drug-response testing to "patients with ancestry in genetically at-risk populations." Although there has been some movement among medical geneticists toward replacing the concept of racial groups with one of geographic ancestral groups (Fujimura and Rajagopalan 2011), the use of racial categories in medical genetics remains both prevalent and controversial (Ellison and Jones 2002; Fullwiley 2011; Lee and Mudaliar 2009; Montoya 2011; Shields et al. 2005a). The prevalence of race in this prestigious field conveys the message that racial identity is highly pertinent to genetic variation, and that certain racial/ethnic groups are to be considered "at-risk."

Furthermore, it is widely expected that the current wave of genetic association studies will soon have an important impact on clinical medicine, allowing diagnosis and treatments to be tailored to individual genetic profiles (Green et al. 2011). However, genetic profiling is not yet widely available. In the absence of such tests in everyday clinical practice, race is routinely used as a surrogate for genetic variation (Cooper et al. 2003; Holden 2003; Jorde and Wooding 2004; Lee and Mudaliar 2009; Lee 2007; Schwartz 2001; Tutton et al. 2008; Yancy 2008). Race is being treated as a placeholder in the “meantime,” while the expected genetic revelations are sought (Ellison et al. 2008; Kahn 2009; Ncayiyana 2007).

Another factor encouraging clinicians to view race as clinically relevant is that since the late 1980s, in the interest of tracking and addressing disparities in health, a series of federal laws and policies have institutionalized the use of racial categories in health research and reporting (Epstein 2007; Roberts 2011). Particularly noteworthy is the 1993 U.S. federal policy that requires that federally funded studies include racial/ethnic minorities (Kahn 2009). Subsequently, reports identifying racial differences in health outcomes have become a ubiquitous feature of health literature.

In an ironic way, interest in resolving health disparities has given racial categories new life in clinical medicine. Because racial identity is thought to provide a rough guide to the distribution of factors affecting disease incidence—social class, culture, and genes (Bloche 2006; Bonham et al. 2005)—clinicians are taught that a patient’s race is important to consider in clinical care. When this logic is applied to the management of common chronic conditions with complex multifactorial etiologies such as diabetes or hypertension, prevailing social conceptions of the racial group’s biology, socioeconomic status, and behavior may be readily substituted for more careful consideration of this complex picture (Witzig 1996).

Race in Clinical Literature and Practice Guidelines

The messages clinicians receive about the pertinence of racial identity to diagnostic and treatment decisions are both incessant and confusing. A quick perusal of the recent medical literature reveals that research findings are conventionally stratified by racial/ethnic group. The literature encourages clinicians to take racial/ethnic identity into account in a variety of ways: as a risk factor, as important to disease incidence and treatment adherence, as a crucial consideration in the choice and interpretation of diagnostic tests, and as a potential indicator of genetic susceptibility and therapeutic response.

Race/ethnicity also prominently appears in current practice guidelines for many health conditions. Specific recommendations refer to race/ethnicity as though it were a straightforward patient characteristic with important clinical implications, comparable to age or gender. For example, current clinical guidelines for prostate cancer (Wolf et al. 2010), diabetes (ADA 2011b), and hypertension (Chobanian et al. 2003) all identify race/ethnicity as a risk factor and make differential screening and treatment recommendations based on a person’s race.

Clinicians encountering these recommendations find no clear explanation for these differences, principles for interpreting them, nor specific instructions for their application to

individual patients. These important assessments will presumably be made “in the trenches” in the course of practice. Some might argue that physicians are trained to be objective and that racism and social stereotyping will thus play a negligible role, if any, in these applications. Others, however, claim that our long history of racial segregation and racism are certain to manifest in the ways these constructs are interpreted and applied (Duster 2006; Krieger 1987; LaVeist 2005). In either case, medical research and practice are produced and interpreted through powerful cultural lenses (Berger and Luckmann 1990; Keita and Kittles 1997) and in our society race remains a potent cultural lens.

In order to better understand how racial differences are understood by practicing clinicians and how these ideas might influence the care they provide to racially labeled patients, we next consider findings from interviews we have conducted with a group of primary care clinicians. The interviews explored how they understand the clinical relevance of racial difference and how they say these concepts affect their care of common chronic illnesses often associated with racial health disparities. We consider the specific ways they say race impacts health and some of their strategies for incorporating race into practice.

The Study

Over a two-year period, we conducted a study of primary care clinicians and their patients, examining understandings of health disparities, and concepts of racial difference in the management of chronic illness, particularly of diabetes and hypertension. We conducted open-ended, in-depth interviews with a purposive, snowball sample of 58 clinicians from 44 family practice and internal medicine clinics in a midwestern U.S. state. These were a cross section of types of clinics: university based, health-system based, physician owned, and FQHCs (Federally Qualified Health Centers); clinics serving urban, rural, and suburban populations; and clinics serving racially and economically diverse populations (see Table 1). The clinicians we interviewed were mostly physicians, but also included a few nurse practitioners and physician assistants (see Table 2).

Interviews averaged about one hour, were audio recorded and transcribed then coded into SPSS and NVivo9 databases. Our primary analysis strategy involved generating increasingly in-depth coding categories as analysis proceeded, based on emerging thematic patterns (Bernard 2006). To minimize investigator bias, all phases of data processing and coding were cross-checked in research team conference sessions, including review of individual cases and of consistency in coding. In this article, we enumerate major trends in the data, to give the reader a sense of how widely shared a notion is among those we interviewed. We also have selected short excerpts from the clinician interviews to illustrate our points, give concrete examples of the way the clinicians spoke of these topics, and to document some especially noteworthy comments or viewpoints.

Race is Important!

The clinicians in this study were a diverse group with different racial/ethnic backgrounds, working in different types of clinics, and having studied medicine during different periods of time. Still, they were remarkably consistent regarding the salience of race to health care, with all but one of the 58 saying they believe race/ethnicity is clinically important. When

asked if race should be taken into account in providing care, a striking 78% (45/58) responded with quick, emphatic agreement, using words like “sure,” “absolutely,” or “definitely,” which was then followed by a recitation of familiar conditions and population groups. Although our question was open-ended, the examples they chose were of a limited set of conditions: sickle-cell anemia and prostate cancer unequally affect African Americans, cystic fibrosis affects Caucasians, and Ashkenazi Jews are prone to Tay-Sachs disease. Most also noted that diabetes and hypertension are more prevalent among racial minorities, particularly African Americans, Hispanics and Native Americans. The clinicians also often mentioned a set of race-based diagnostic and treatment considerations, which we consider in more detail in a later section of this article.

Some clinicians (14%, 8/58), while saying race has some pertinence in the clinic, expressed skepticism over its significance, saying other factors such as obesity or family history are what’s really important. It is noteworthy that all but one of those expressing such skepticism about the clinical relevance of race had studied medicine prior to 1990—that is, prior to the flood of reports on racial differences in health that began in that decade. Only one flatly denied the clinical relevance of race. Interestingly, this physician was a black West African immigrant to the United States, whose singular view may reflect having been raised in a very different racial environment. This small amount of equivocation aside, there was very strong consensus among those we interviewed that race is clinically important.

How Is Race Determined?

In a practical sense, an essential aspect of employing race as a clinical factor is deciding to whom racialized criteria should be applied. In our interviews, after the clinicians had discussed at length the ways in which race is important to clinical care, we asked a very basic question: “Can you tell me how you know someone’s racial or ethnic group?” In sharp contrast to the confident tone in which most had asserted that race is important, this simple question was most often met with a nervous laugh, a long pause, or a comment like “That’s a good question!”

In that race may play an important role in clinical decision making, it is sobering to consider how arbitrarily racial classifications are made. The majority (69%, 40/58) of these clinicians said they determine a person's race based on appearances. For the most part, they expressed no concern about this method. For example, one white physician working in a large suburban clinic simply said, “I can assume that easily, just by looking at them.” [CQ213] Another white physician, who works in an FQHC in a midsize city, put it this way: “I think we mainly go the old-fashioned way: What color are you?” [CQ226]

Many others, however, were clearly uncomfortable admitting they relied on what a patient looks like. For example, a white nurse practitioner working for a large health system in a minority-serving clinic commented, “I hate to think I’m a bigot, but I do use visual cues.” [CQ253] A white physician who is married to an African American and works in a similar clinic rather cynically remarked, “I do what everybody else does—slap a label on them before they even open their mouths.” [CQ251]

Many (38%, 22/58) said in addition to visual classification, they may ask patients their identity—especially when they are unsure by looking at them, or if they note an accent or a different style of dress. Almost half (45%, 26/58) mentioned they could look in the medical chart to verify race, but most said they do not actually do this because the information is buried in the chart, is not consistently included, or is often inaccurate.

Although acknowledging that classification methods are arbitrary and imperfect, the clinicians still viewed race as a real and noteworthy patient characteristic important to clinical care. What might be the basis of this pronounced belief in the importance of race?

Why Is Race Important?

One reason the clinicians view race as clinically important is that the idea has come to them with a great deal of scientific authority. Nearly half (48%, 28/58) mentioned clinical research or medical science as the basis for this conviction. They often prefaced their assertions about racial differences with phrases like “The literature tells us... .” “Research shows... .” or “Medical science has found... .” Many also said race had been emphasized in their medical education, saying things like “We’ve always been taught... .” or “You hear a lot about it in school... .”

Although race is indeed a prominent category in medical research, education, and practice guidelines, it remains a “black box” concept. Race is a vague and undefined construct, asserted to be important in the absence of specific reasons for the observed or expected differences (Shim 2005). Clinicians are thus left to their own cultural understandings and assumptions in interpreting racial difference. In discussing how race impacts health, the clinicians we interviewed invoked several very different domains—biological differences, class, and cultural differences, and racism—reflecting the multifaceted and flexible nature of their interpretations of the clinical relevance of race.

Biological Difference

Although biological race has been widely rejected by many scientists (AAA 1998; Goodman 2000; Lewontin 1972), it remains an important concept for those we interviewed. The majority (84%, 49/58) said that there are biological differences between races that affect health. The clinicians often asserted that genetic inheritance makes some racial or ethnic groups susceptible to certain diseases or causes them to respond differently to certain medications. Some included genetic-sounding terminology in their discussions of race, such as “genetic pattern,” “genetic background,” “biogenetics,” and “ethnogenicity.”

This belief that genetic science supports the existence of biological race was especially evident in how the clinicians discussed the role of family history in minority patients’ health. The importance of family history in the occurrence of a variety of diseases is a well-established consideration in clinical care. However, when referring to racial minority patients, the discussion of family history was oftentimes transformed into a discussion of racial ancestry. For example, consider the comment of one white nurse practitioner who works in an inner-city charity clinic: “You see it not only within the family history, but looking even further back into the racial history of that class of patients.” [CQ204]

The clinicians indicated that race-based differences in medication response are especially persuasive evidence that races differ biologically. Fully three-fourths (76%, 44/58) mentioned racial or ethnic differences in drug metabolism at some point in their interview. As one white physician from a large suburban group practice asserted, “Certainly that has nothing to do with that person’s socioeconomic status, it’s just more of a genetic thing.” [CQ241]

Despite the prominence of biological explanations, three clinicians outright rejected the idea of a biological basis for racial differences in health, all of whom were themselves minority clinicians. An African American internal medicine physician in private practice in a large city was especially emphatic about this point:

Personally, now after doing this for 20 years, I feel that there is no difference in the hypertension that African Americans suffer that would cause them to be treated differently than any other group, minority or otherwise... I really don’t see any reason for us to focus on race as an issue. [CQ222]

Class and Culture

Although biological explanations were prominent, all but one clinician combined these explanations with socioeconomic or cultural factors to explain health differences. As a 60-year-old white physician in private practice succinctly put it, “It’s genetics and lifestyle.” When discussing such lifestyle factors, the clinicians often employed a variety of commonly held assumptions about racial or ethnic minorities’ cultural beliefs, behavioral habits, and socioeconomic status. Many commented (76%, 44/58) that minority patients are poor and uneducated, which has important health implications. Most often these comments were sympathetic, framing such patients as victims of circumstance: due to low education and literacy levels, they may be unable to fully understand their diagnosis, screening, treatment, and follow-up recommendations.

Several (36%, 21/58) cited lack of regular access to quality health care as a negative impact on minority health. Interestingly, this was framed in contrasting ways. Some noted that in the United States, the high cost of care and inadequacies in insurance coverage inordinately affect minorities. Others, however, blamed irresponsibility on the part of minority patients. For example, a white internal medicine physician who was about to retire from a small group practice remarked, “Medical care is much less available to a lot of minorities, but I think they are less quick to seek it if it is there.” [CQ219]

Diet was a major topic of discussion in terms of the impact of socioeconomic status on health. With limited income, many reasoned, minorities might not be able to afford a proper diet. Others took a less empathetic view, framing poor diet as reflecting irresponsible choices. One white, newly graduated family physician expressed this view in these words:

When I say a poor diet, I don’t mean not enough food, I mean making wrong food choices, or poor food choices... I see mothers who love their kids, they think they’re doing the best, but they think it’s okay for their kids to eat McDonald’s three times a week, because that’s what they ate growing up. [CQ257]

Not surprisingly, given the recent prominence of cultural competency training in medical education, cultural beliefs were also a frequent theme. Many (76%, 44/58) said that certain groups hold attitudes and beliefs that drive behavioral choices that negatively impact their health: Hispanics fear insulin; Hispanic men avoid doctors so as to not appear weak; African American women prioritize their family's health while neglecting their own; and the Hmong prefer folk remedies over medical treatment. Culture was also viewed as driving unhealthy food choices: Hispanics eat spicy, greasy foods and African Americans prefer a diet high in salt and fat.

Minority culture was also thought to cause people to accept unhealthy conditions as normal or even to prefer them. A few (9%, 5/58) said that African Americans and Hispanics think being fat is healthy. For example, a 32-year-old white family physician working with primarily Hispanic patients remarked,

The Latino population thinks that kids should be fat—I mean I'm constantly seeing mothers who think their child is not eating good and is underweight. But the child is totally normal, on the growth curve where they should be. [CQ214]

Another white physician, who works in a clinic serving primarily African American patients remarked,

One of the things that frustrates me the most is African American women coming in here who are already overweight and obese telling me that they need to gain weight... They say, to be tactful, "My boyfriend says I need a bigger booty." And I say, "No you don't. You're already overweight, it's probably affecting your lipid profile, it's already affecting your cholesterol and your blood pressure, you're going to get diabetes sooner or later with this." It's like swimming upstream with some of that... Where do I start? That's a cultural thing. [CQ226]

Although this is an extreme example, it illustrates a common way these clinicians understood "culture." Many took cultural factors to be a predisposing set of ideas that compelled group members to perform particular behaviors and/or hold certain ideas that could negatively impact health.

Racism

The impact of racism—real or perceived—was a frequent (41%, 24/58) topic in the clinicians' discussions of health disparities. A few (12%, 7/58) said racism may cause long-term stress that can result in illness, noting that the pressure and anxiety of living as a minority person in poverty in the United States can have physical effects. In the words of a white family practice physician who works in a low-income clinic in a midsize city,

[There is] a lot of what I call drama that my patients bring with them that impacts the control of hypertension and control of diabetes. A lot of the drama is dealing with the overspill of racism. And I can see it when their blood pressure's up and they're upset because one of their sons just got picked up by the police, or is in jail, or their kids can't walk the neighborhood because the dope dealers are out... All of those things impact their care MORE than the little medications that I have to offer. [CQ256]

A few individuals (14%, 8/58) observed that minorities, especially African Americans, have long been systematically discriminated against in the quality of health care provided to them. Strikingly, all but one of the clinicians making these observations are themselves African American, and the one Caucasian is the parent of biracial children. Several described first-hand knowledge of racial discrimination in health care. For example, one African American physician working in private practice in a large city said,

I have patients who come to me and tell me [their previous doctor] took no concern about their health. And when I go back and review their old records, it appears that if the doctor had treated them more aggressively they could have prevented them going into renal failure... . Maybe those doctors say, "You black people end up in renal failure anyway." [CQ240]

Several clinicians (26%, 15/58) brought up the notion of mistrust, most often as an explanation for patient noncompliance with medical advice. "They don't trust doctors, they don't trust hospitals," commented a middle-aged white physician who was working in a large minority-serving urban clinic. [CQ224]

Although most discussions of the impact of racism were empathetic, some clinicians who said minority patients were responding to perceived racism were clearly not convinced that this perception was based on real problems with the health care system. One of the white physicians, serving a mostly white clientele in a group practice in a midsize city, made these remarks:

Some of them believe that a white doctor is going to give them deliberate bad advice for genocide. And they are taught this at home... . [I was told] they believe that vehemently, they are absolutely convinced that there is this conspiracy that bad things will happen if they go to see a white doctor... . Holy Cow! How do you build trust with someone who's got the Malcolm X mentality? I don't know how you fix that. [CQ254]

In these examples we see two distinct ways that the clinicians talked about the clinical significance of racism. Some recognize that racial labels may have a negative impact on the content of the care patients receive. In contrast, others see perceptions of racism as affecting how minority patients engage in the clinical relationship, resulting in mistrust and noncompliance.

How Should Race Affect Clinical Care?

We have seen that the clinicians were nearly unanimous in their belief that race/ethnicity should be taken into account in providing clinical care. However, they identified specific race-based clinical strategies for only three conditions: prostate cancer, hypertension, and diabetes.

Prostate Cancer

Although prostate cancer was not a focus of our interviews, more than half (55%, 32/58) volunteered it as an example of a condition where race should affect clinical care, noting that it unequally impacts African American men. Most recited a version of the American

Cancer Society's prostate cancer screening guidelines (Wolf et al. 2010); as a middle-aged African American physician put it, "Black males are screened at 40 years of age where white males are screened at 50." Despite this consistency, the clinicians showed little agreement about the reasons for this difference: their genetics predispose African Americans to this cancer; their lifestyle puts them at risk; or they are prone to an aggressive, early onset type of prostate cancer. Only two, both white physicians working in suburban clinics, expressed hesitation about the idea of disparate susceptibility, noting that incidence rates may reflect differential access to care.

Diabetes

Nearly three-fourths (72%, 42/58) said that race/ethnicity is important to consider in diabetes management. However, there was considerable variation regarding which groups they were concerned about: Hispanics, African Americans, Native Americans, and/or Asians. Interestingly this disparate list reflects the 2011 ADA Standards of Medical Care in Diabetes, which calls for diabetes testing in asymptomatic "high risk race/ethnicity" adult individuals: "African American, Latino, Native American, Asian American, Pacific Islander" (ADA 2011b:s14). The guidelines make no further recommendations specifically for these groups.

Some clinicians told us they screen minority patients for diabetes more frequently or at a younger age than nonminority patients. A few (10%, 6/58) said they treat minority patients more aggressively than others, prescribing medications to patients with test results only in the "pre-disease" range. (The ADA defines pre-diabetes as "blood glucose levels that are higher than normal but not yet high enough to be diagnosed as diabetes" [2011a].) The logic behind this was explained this way by one Asian physician who works in a large group practice:

If I have a young obese Hispanic patient, and they've not yet been diagnosed as having diabetes, I would tell them that based on their ethnic background they're at a higher risk for developing diabetes ... sometimes I even put them on metformin,¹ and some medications that help them lose weight. [CQ217]

In the absence of specific explanations or recommendations about why race/ethnicity is emphasized in clinical standards for diabetes management, individual clinicians are left to determine on their own how exactly to integrate the racial element into practice, opening the door to racially disparate health care delivery.

Hypertension

Race was most frequently (88%, 54/58) mentioned as a treatment consideration in selecting medication for hypertension, especially for African Americans. This consistency may reflect how regularly the clinicians receive this message. One recently graduated physician told us that one of her medical textbooks had an entire chapter devoted to hypertension in African Americans. Race is also heavily emphasized in national hypertension management

¹Metformin is a generic oral antidiabetic drug.

guidelines that cite the results of a number of clinical trials showing differential treatment response in African Americans (Chobanian et al. 2003).

Because clinicians routinely screen the blood pressure of all patients at every visit, they did not describe earlier or more frequent screening standards for minority patients. However, three (5%, 3/58) said they may be quicker to diagnose and treat hypertension in African Americans because they are at higher risk for the condition.

The need to be “more aggressive” in treating hypertension in African Americans was discussed by a number of clinicians (17%, 10/58). This was often framed in terms of the disease itself being more aggressive and more difficult to manage in this population, as noted by this white family practice physician working for a large health network: “I am finding it difficult to treat hypertension in my African American patients. So not only is there a lot of it, but the severity seems much worse. So more of my African American patients are on three drugs, four drugs, five drugs. In general I would say, more than my Caucasian patients of the same age who I’m treating.” [CQ224]

The primary way the clinicians said they consider race in hypertension management was in medication selection. The vast majority (86%, 50/58) noted that they had been taught to prescribe different antihypertensive medications for African Americans. A few (9%, 5/58) said although they had been taught this, they did not do so, either because they did not believe race could warrant this, or because they simply could not make sense of the ever-changing treatment recommendations. As one young white physician who works in a low-income clinic in a large city explained, “The whole calcium channel blocker thing in African Americans, I learned that in medical school. You read one article—it says it works and then another one says that it doesn’t.” [CQ249]

Most (76%, 45/58) said they did in fact prescribe hypertension medications differently for African Americans. However, this high level of consensus belies the high variability in the specific drugs they say are recommended for this group. Most commonly (28%, 16/58) they cited calcium channel blockers as preferred for African Americans, but diuretics (22%, 13/58), beta blockers (9%, 5/58), ACE inhibitors (7%, 4/58), and hydralazine (7%, 4/58) were also mentioned.² There were also some clinicians (10%, 6/58) who said ACE inhibitors and beta blockers are contraindicated for African Americans.

The explanations offered for these differences in susceptibility and treatment response were likewise highly variable. A number of clinicians (17%, 10/58) asserted that some minorities require special treatment because as a group they are “salt sensitive,” and/or typically eat a high salt diet, placing them at particular risk. Others drew on assumptions about biological race. For example, a physician in private practice serving primarily low-income patients commented,

²It is noteworthy that hydralazine is one of two drugs comprising the combination medication BiDil, famously the first “race-based medicine” approved by the FDA, labeled for treatment of congestive heart failure in African Americans (Epstein 2007; Kahn 2009; Roberts 2011). One of the four clinicians who mentioned hydralazine specifically named BiDil, which he said is effective for hypertension in blacks, due to their “genetic profile.”

It has to do with the endothelial lining of their vessels. And also their hearts are stronger and that's why we know for instance that beta blockers work better in African Americans... . But usually it's due to musculoskeletal issues. They are just bigger people. [CQ252]

Thus, we see that the clinicians drew on a variety of the assumptions about racial difference we reviewed above in explaining differential prescribing. Their explanations ranged from broad references to presumed biological or genetic differences that affect disease physiology or drug metabolism, to more specific assertions about presumed dietary or behavioral differences.

Discussion and Conclusion

In this article we have analyzed how a small, purposive sample of clinicians talk about the place of race in primary care, which has produced some interesting insights. Observational studies and/or surveys of nationally representative samples could more fully examine how widely held these concepts are and how they are actually enacted in the clinic. Despite these limitations, our study has clearly shown some of the serious problems associated with the common practice of invoking race in clinical care.

Race is an important concept in our society. It is something everyone knows, but no one can readily define (Malik 1996). It is an insidious concept that in its rudimentary familiarity finds its way, unchallenged, into various sociopolitical and scientific institutions. This is especially true in contemporary medical circles.

Throughout their careers, in research reports, clinical guidelines, and medical education, clinicians regularly encounter race as a mundane patient descriptor, an important characteristic, indicating specific risk profiles and requiring specific diagnostic and treatment procedures. Despite its prominence in medicine, race remains a "black box" concept without clear definition or specific effects (Shim 2005), leaving open to interpretation what exactly there is about race that is clinically relevant.

Indeed, in our analysis we have seen these clinicians struggling to interpret and apply incessant but ill-defined and ever-changing messages that race is important to clinical practice, revealing the arbitrariness of using race as a basis for clinical decision making. The nature of their varied ideas about what to do, why to do it, and exactly to whom it should be done illustrate the deep roots of this concept, not in medical science, but in socially learned notions of racial difference. Clinicians are drawn into the typological thinking of traditional notions of race, not only in terms of presumed biological differences, but also in assumptions about group behavioral and experiential characteristics.

It is impressive how few of these clinicians questioned the salience of race for clinical care. For the most part they dutifully enacted race in their practices, despite rather arbitrary methods for determining racial group membership. In their certainty of its clinical importance, they comfortably summoned common assumptions and stereotypes about racial groups as the rationale behind race-based care. Few seemed concerned about using such an ill-defined construct as a basis for choosing treatments or that there was so little agreement about exactly what diagnostics and treatment modifications were required and why.

Although minority clinicians were also apt to apply these concepts in caring for racially marked patients, they most often expressed a more nuanced understanding of race and its health implications. For example, African American clinicians were clearly distinct in the emphasis they gave to the role of racism as a factor affecting both the quality of care and the physical health of minority patients. Previous research has similarly found African American physicians to be more willing to talk about the role of racism in clinical care than white physicians (Bonham et al. 2009; Snipes et al. 2011).

As a group, the clinicians in this study offered a wide variety of biological and lifestyle factors in their efforts to explain how race/ethnicity impacts health. Although there is little support for the existence of biological differences among socially marked racial/ethnic groups (Braun 2004; Goodman 2000; Kahn 2009; Kaufman and Cooper 2010), the health implications of the shared history of racial/ethnic groups have been well documented. There is a broad research literature documenting that health disparities are clearly correlated with socioeconomic status, racial discrimination, poverty, inadequate health insurance, lack of access to quality health care, and unequal exposure to environmental hazards (Braun 2004; Dressler et al. 2005; Krieger 2005; Shields et al. 2005b; Smedley et al. 2003). Thus, the clinicians' consideration of such factors as clinically relevant in treating minority patients may have some applicability.

However, in invoking socioeconomic and lifestyle factors, the clinicians most often painted minority patients with a broad brush, drawing on a variety of presumptions about the cultural beliefs, behavioral habits, and socioeconomic status of racial/ethnic groups, rather than seeking specific information about individual patients. To approach certain patients as representatives of a group seems antithetical to the clinical agenda of providing the most appropriate care for each patient.

We have seen that current health literature encourages clinicians to see their patients through a racial lens, and many respond accordingly. It would seem, therefore, that the systematic inequalities that have been observed in the clinical care that racialized patients receive (Smedley et al. 2003) likely reflect more than structural inequalities alone. They may also be attributable to this systematic authorization of race-based care. The arbitrary and contradictory ways the clinicians in this study understand and apply the concept of race raise concern that not only does using race to inform diagnostic and treatment choices lack scientific rigor, it may also put patients at risk of receiving nonstandard care (Acquaviva and Mintz 2010).

What then, might be the appropriate clinical application of knowledge of differences in disease risk and treatment response? That clinically relevant factors may correlate with racial identity should not become a distraction or a rationale for using race as a proxy. Rather than being taught to modify care for racialized patients, clinicians should learn to identify whether the relevant factors are indeed present or absent for each individual patient, no matter what their race. If accessing quality health care is known to be an issue, has this patient had limited access and what can be done about it? If a variant of a drug-metabolizing enzyme might affect treatment response to a given medication, does this patient have that

enzyme variant or not? If stress—whether racism-induced or otherwise—can impact disease development, does this patient experience such stress?

As yet, race remains a ubiquitous construct in health research and clinical guidelines. Mitigating the racialization of primary care will only occur through educating clinicians to a deeper appreciation of the insidious nature of racial thinking, and encouraging evaluation of each patient as an individual, rather than as a representative of a group (Hunt 2001). Clinicians should be aware that relying on race as clinically relevant, whether framed in blaming or in exculpating terms, has real consequences for racialized patients.

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Table 1

Selected Characteristics for 44 Clinics

	No.	%
Type of Clinic		
University	2	5
Hospital/Health System Owned	11	25
Physician Owned	19	43
Federally Qualified Health Center	6	13
Other	6	13
Location of Clinic		
Urban	30	68
Rural	6	14
Suburban	8	18
Primary (> 50%) Patients Served		
Non-Hispanic White	25	57
African American	14	32
Hispanic	3	7
Native American	2	5
No. Clinicians Interviewed per Clinic		
1	32	73
2	10	23
3	2	4

Table 2

Selected Characteristics for 58 Clinicians Interviewed

	No.	%
Sex		
Male	26	45
Female	32	55
Race/Ethnicity ^a		
Non-Hispanic White	37	63
African American	10	17
Native American	2	3
Pacific Islander	2	3
Asian	5	9
Hispanic	2	3
Age		
<i>Range: 27–77, Median: 43</i>		
24–34	12	21
35–44	19	33
45–55	16	27
> 55	11	19
Degree		
MD (Doctor of Medicine)	34	59
DO (Doctor of Osteopathic Medicine)	17	29
PA (Physician Assistant)	2	3
NP (Nurse Practitioner)	5	9
Year Med/Prof Graduation		
< 1984	13	22
1985–1994	16	27
1995–2004	22	38
2005 +	7	12
Location of Practice		
Urban	40	69
Suburban	11	19
Rural	7	12

^a Clinicians were asked, “How would you describe your own racial or ethnic background?” In the interest of simplification, we have summarized their open-ended responses into these standardized categories. For example, French, Caucasian, or European would all be classified as “Non-Hispanic White.” In the three cases where labels from different categories were listed, we used the first one mentioned for this table.