

**Special Article**

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## The Role of Race in the Clinical Presentation

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*What role, if any, should race play in clinical presentations? While race is widely used as a way of identifying patients, this practice has been challenged as conceptually flawed, potentially misleading, and possibly prejudicial to the patient. There are, however, important reasons for not excluding information about race. This article includes a set of guidelines for the inclusion of racial data in presentations: (1) Race is a social construct and, if used, should be recorded in the social history, not the opening sentence of the presentation. (2) Patients should self-identify their race or races. (3) Race should not be used as a proxy for genetic variation, social class, or other elements of the social history. (4) Clinicians should be mindful of the potential influence of racism in the clinical encounter.*

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Traditionally, clinical presentations begin with a patient's age, race or ethnicity, and gender. This format implies that these variables are important, objective, and biologic facts that are requisite for clinical reasoning. It is argued that racial identifiers are necessary because they provide clues about disease probabilities, particularly genetic conditions,<sup>1</sup> predict drug response,<sup>2</sup> help clinicians form a mental picture, and provide information about the patient's diet, education, and culture.<sup>3</sup> However, race as a taxonomic category has been increasingly questioned over the past 100 years. Most, though not all, current scholars view racial categories as a reflection of social, not biological, divisions.

Caldwell, Popenoe,<sup>4</sup> and Witzig<sup>5</sup> challenged the use of race in case presentations. They noted ambiguities surrounding the meaning of race and its lack of validity as a scientific construct. Caldwell and Popenoe concluded that "The diagnostic and therapeutic utility of the terms *black* and *white* is limited." Witzig favored abandoning racial identifications but suggested that

ethnicity may be useful if considered in concert with other variables such as class, culture, religion, and education. Additionally, Caldwell, Popenoe, and Witzig found that racial identifiers were potentially prejudicial to patients.

There are, however, arguments for not excluding information about race. Considerable epidemiological evidence demonstrates marked health disparities among racial groups.<sup>6,7</sup> Further, historic patterns of racial disparities have fueled a growing interest in racism and its role in maintaining these disparities.<sup>8-10</sup> The growing interest in minority health<sup>11</sup> and culturally competent care<sup>12</sup> requires that clinicians address the role of race and its effect on patients. If clinicians omit race because it is not a biological variable, do they risk ignoring or, worse, concealing important social data about their patients? Recognizing this dilemma, the question becomes: "How and when should clinicians include information about a patient's race?"

### The Concept of Race

The idea that races are "natural divisions of mankind" (ie, biologically distinct human subspecies) is common in medical practice and in popular opinion. Yet, as early as 1935, Huxley and Haddon were questioning the biological basis of human races.<sup>13</sup> The ensuing 65 years have seen efforts throughout many disciplines to rethink the meaning of race. Much of this

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scholarship has occurred outside of medicine: in sociology,<sup>14,15</sup> law,<sup>16,17</sup> anthropology,<sup>18,19</sup> and the history of science.<sup>20-22</sup> Increasingly, however, these issues have been reflected in medicine,<sup>23,24</sup> medical research,<sup>25,26</sup> and public health.<sup>27-29</sup>

Modern thinking in anthropology recognizes an enormous diversity within even small human population groups and has moved away from a color-based racial picture of human variation. Population genetics has failed to support the validity of race as a method for classifying genetic variability among humans,<sup>30</sup> and race is not part of modern taxonomy.<sup>31</sup> It is becoming accepted that “Race is an arbitrary system of visual classification that does not demarcate distinct subspecies of the human population.”<sup>18</sup>

An emerging viewpoint sees race as primarily a social classification. The idea of race evolved “largely to justify the highly profitable African slave trade and the systems of slavery in the Americas.”<sup>28</sup> Racial categories, at least in the United States, appear in the early 17th century in the legal apparatus designed to formalize chattel slavery among African-Americans.<sup>21</sup> Race has a reality today because it reflects important social divisions.

### Racial Identifiers

The use of racial identifiers in clinical medicine can be traced back to at least the mid-19th century,<sup>32</sup> but a recent survey found that the majority of medical schools still teach students to include race in patient written and oral presentations.<sup>4</sup> Some physical assessment texts,<sup>33,34</sup> but not all,<sup>35,36</sup> suggest that race be considered as part of the data identifying patients.

Despite the widespread use of racial identifiers in clinical medicine, racial classification poses conceptual and methodological difficulties.<sup>37</sup> There is no gold standard for racial classification, and definitions of race vary widely (Table 1).

Health care settings, particularly those receiving federal funding, use racial and ethnic categories derived from the Office of Management and Budget’s (OMB) Directive 15.<sup>38</sup> Directive 15 recognizes five races (American Indian or Alaska Native, Asian, black or African-American, Native Hawaiian or Other Pacific Islander, and white) and two ethnic groups (Hispanic or Latino and not Hispanic or Latino).

Notably, OMB considers its categories as “social-political constructs” that “should not be interpreted as being scientific or anthropological in nature.” There is no reason to assume that OMB categories are well-suited for the purposes of genetic, clinical, or epidemiologic research. In fact, racial categories have increased and decreased over time and will undoubtedly change again. The recent census option to select multiple races will challenge the traditional clinical practice of assigning patients and research subjects a unique race.

### Determining a Patient’s Race

Many states throughout the 20th century legislated definitions of race.<sup>17</sup> These definitions were often concerned with preserving the purity of the white race, so that individuals of mixed-white/non-white descent were assigned the non-white race. This practice was justified by what was known as the “one drop of black blood” theory.

What race would be assigned to the child of a white mother and a black father? Is the child white, black, mixed, or some other term? The National Center for Health Statistics publishes algorithms for determining the race of newborns. Prior to 1989, this child would be given the race of the non-white parent. After 1989, this newborn was assigned the race of the mother.<sup>39</sup> Therefore, this infant would have been considered black in 1988 and white in 1990. Clearly, neither of these definitions are biologically based; rather, they reflect the social nature of racial identity.

Clinicians are not given formal instruction in discerning a patient’s race. Sapira suggests questioning

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Table 1

#### Definitions of Race

- James C. King, *The Biology of Race*, 1981<sup>58</sup>  
“What constitutes race is a matter of social definition. . . . When we look around the world, we find that different cultures define race differently, and every culture has its own peculiar way of reacting to it.”
  - *Mosby’s Medical, Nursing, and Allied Health Dictionary*, 1994<sup>59</sup>  
“race: [It, *razza*], 1. a vague, unscientific term for a group of genetically related people who share certain physical characteristics. 2. a distinct ethnic group characterized by traits that are transmitted through their offspring.”
  - Pat Shipman, *The Evolution of Racism*, 1994<sup>60</sup>  
“[W]hat biologists understand [race] to be today [is]: a regional subdivision of any species (human or not); a local population, loosely united by a tendency to share particular variations in phenotype (appearance) or genotype (genetic inheritance).”
  - Senior and Bhopal, *British Medical Journal*, 1994<sup>61</sup>  
“[Race] in the biological sciences means one of the divisions of humankind as differentiated by physical characteristics. . . . The conclusion that race is more useful for social rather than biological explanations of variations in the prevalence of disease is now widely agreed.”
  - Jonathan Marks, *Human Biodiversity: Genes, Race, and History*, 1995<sup>18</sup>  
“The ‘three races’. . . merely designate three major migrations into the United States: from (West) Africa, (Western) Europe, and (East) Asia.”
  - Vogul and Motulsky, *Human Genetics: Problems and Approaches*, 1997<sup>62</sup>  
“A race is a large population of individuals who have a significant proportion of their genes in common and can be distinguished from other races by their common gene pool. . . . Classifications by various authors differ somewhat in detail; subdivision into the three main races, Negroids, Mongoloids, and Caucasoids, is accepted by practically all of the observers.”
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the patient when the clinician is "in doubt about the proper term,"<sup>34</sup> and DeGowin and DeGowin<sup>33</sup> state that the "patient may not be able to give a satisfactory answer." Many practitioners decide racial or ethnic designations based on the patient's skin color, hair texture, spoken language, last names, and behaviors.<sup>3</sup>

In clinical practice, patients may be assigned different races at different times. In an observational study of patients admitted to New York hospitals, Blustein found that admission clerks assigned patients to racial categories without formal rules. The clerks had been instructed to avoid direct questioning of the patient.<sup>40</sup> In this study, 6.5% of the 767 patients were found to have been assigned a different race on their second admission. Similar inconsistencies in racial classification have been noted when birth and death certificates of infants have been examined.<sup>41,42</sup>

Many people seen in US clinical practice consider themselves biracial or multiracial. Assigning a single race to these patients is inaccurate; it may be misleading and potentially offensive. Given the problems with racial identifications, a Centers for Disease Control working group proposed that "Race and ethnicity status should be self-identified using a multiple-choice option," and that "Observer-derived measures of race and ethnicity should be eliminated."<sup>43</sup>

### Race as a Proxy for Genetic Variation

The racial categories commonly used in clinical practice describe population groupings containing billions of people. Most human variation, however, occurs within these large racial groups and not between them.<sup>44</sup> Any classification of genetic variation is arbitrary because clear boundaries do not divide humanity. The utility of racial categories is further limited by the intermingling of human populations.<sup>18</sup> Clinically important mutations, such as hemoglobin S, may arise independently in different populations and thus straddle racial categories.

Clinicians often cite sickle-cell disease as a condition justifying the use of racial identifiers, but the sickle-cell mutation is found in a number of populations outside of Africa (including Sicily, Saudi Arabia, and India). We, as well as others,<sup>5</sup> have witnessed delay in the diagnosis of sickle-cell crisis in a Puerto Rican patient labeled as a Hispanic and, therefore, assumed not to be at risk for sickle-cell disease.

A better way to obtain useful information about genetic risk is to ask patients detailed questions concerning their family history, perceived ethnicity, and geographic background. A patient whom the clinician perceives as white may be self-identified as a Russian Jew, a Guatemalan of Basque origin, a Sicilian, or an African-American.

### Race and Social Class

The complex relationship between race and social class has important implications for clinical medicine. Class indicators, such as income, education, and occupation, are significant predictors of health status.<sup>45</sup> Vital statistics in the United States generally do not include class as a category even when economic data may be available. Racial categories are often interpreted as proxy markers for class.<sup>46</sup> Medical researchers and clinicians may substitute race in place of a thorough social history.

These practices lead to a racialization of social problems, ie, the attribution of social differences to problems of race. Much of the reported health differential between racial groups disappears when researchers control for measures of social class such as educational level or income.<sup>47,48</sup> To conceptualize these differentials as racial often leads to speculation about biological factors, when the real problems may be economic. Further, the use of race as a proxy for social status relies on stereotypes concerning the social status of different racial groups. Perhaps the 50-year-old black alcoholic male is an IBM executive, or the 50-year-old white executive has a cocaine problem. Racial categories describe broad social groups within which there is much variation with respect to social status and health risk.

What are some alternatives to using race as a proxy for social class? More clinical value may come from explicit measurement of factors like education, income, occupation, total wealth, housing, marital status, immigration status, and type of health insurance. Kiefer suggests a contextual approach to the social history involving the information on class/culture, service area, gender, and person.<sup>49</sup>

Race is not a substitute for a good social history. A patient's skin color does not provide information about birthplace, education, occupation, income, place of residence, language, or cultural beliefs or preferences.

### Do Racial Identifiers Stigmatize?

Research continues to demonstrate that patients receive different care based on their race or ethnicity in ways that do not appear medically justified.<sup>50,51</sup> It has been argued that the use of racial identifiers reinforces existing patterns of unequal care by evoking stereotypes (positive or negative) in the minds of clinicians.

Consider a case presentation we observed in which a clinically well postpartum patient was described as a "34-year-old, black, cocaine-using mom who just delivered her 11th child prematurely." When the patient presentation pairs a behavior (cocaine use) with a race (black), this may elicit expectations about the patient's lifestyle, suitability for certain medical interventions, and even her value as a human being. Murrell<sup>52</sup> noted that negative stereotypes about pregnant African-American women persist regardless of their income,

education, and insurance status. Not surprisingly, Murrell found that African-American women perceived their prenatal care as inaccessible, and many saw their providers as indifferent or not respectful.

There is a body of research examining how racial identifiers may influence clinical decisions. Some of this research has been descriptive (behavior observed at hospital rounds and chart reviews).<sup>53,54</sup> Other investigators have had clinicians respond to mock case presentations in which the patient's race is varied.<sup>55-57</sup> As a group, these studies support the hypothesis that race does influence clinical decisions in ways often unfavorable to minority patients.

On the other hand, excluding racial identifiers from the clinical database poses a different set of problems. Race influences patients' lives (positively or negatively) and influences the care they receive. Prohibiting the mention of race in the clinical presentation does not make these concerns disappear.

If clinicians wish to include race, then the information might be better placed in the social history and not in the opening sentence of the presentation. Discussing race with patients may be useful as a way to facilitate a more open and less-biased relationship.

### The Bottom Line

What, then, should be the role of race in the clinical presentation? The following guidelines have been helpful to us as clinicians and educators. These guidelines are not offered as a set of hard and fast rules. They are offered in the hope that they will stimulate dialogue and facilitate a reconceptualization of race and its role in medicine.

#### Guidelines

1. *Race should be ascertained by self-identification.* The most valid way to determine a patient's race is to ask the patient. Patients can have no race, one race, or more than one race.

2. *Race should be recorded in the social history.* Clinicians may wish to include racial identifiers to elicit sources of stress, strengths, and supports available to patients and families. Race belongs in the social history, not in the first sentence of the clinical presentation.

3. *Race should not be used as a proxy for genetic variation.* When a patient's specific genetic variant is known (eg, sickle-cell disease), this should be mentioned. When the differential diagnosis includes diseases with a genetic basis, clinicians should seek specific information about the patient's family, ethnic, and geographic background. This information should be recorded in the social or family history.

4. *Race should not be used as a proxy for social class.* The patient's social class can provide clinically useful information and should be specifically described using

variables such as education level, occupation, area of residence, etc.

5. *Racism and its effects on health and the patient-clinician relationship should be considered part of the clinical encounter.* Patients' reports of past, current, or anticipated experiences of racism provide information about stress and potential sources of psychological or physical harm. Racism influences health, access to health care, treatment regimens, and patient-clinician encounters. Self-identified racial or ethnic identifiers need to be included in the medical facility's administrative database so the effects of racism can be studied at an institutional level.

6. *Medical researchers need to adopt a more critical attitude toward their own use of racial identifiers.* If medical researchers continue to use broad-based racial categories as proxies for genetic variation or social class, clinicians are unlikely to change their own practices.

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