US HEALTH JOURNAL EDITORS' OPINIONS AND POLICIES ON RESEARCH IN RACE, ETHNICITY, AND HEALTH

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Health research on race and ethnicity has been criticized for lacking rigor in conceptualization, terminology, and analysis. Scientific journals' editorial processes help determine research quality. This survey assessed editors' awareness of current debates, attitudes toward recent recommendations, and involvement in developing editorial policies. Twenty-nine editors of health journals with impact factors of ≥ 1 (based on citation ratings) were sent a questionnaire including four key problems identified in research literature and recommendations from federal agencies; 23 (79%) responded. Seven editors reported relevant policies. Two had read the federal directive on racial and ethnic classification; one was aware of its current review. Most perceived the four key problems as uncommon. The majority agreed with Public Health Service recommendations on race and ethnicity research, except for analyzing effects of racism. Approximately 20% had discussed issues with co-editors, editorial boards, or reviewers. About 40% saw further discussion as beneficial; four planned to draft guidelines. Editors' potential for helping resolve problems in race/ethnicity research is not being realized. Greater participation would be beneficial to public health research and practice. (J Natl Med Assoc. 1998;90:401-408.)

Key words: race • ethnicity • health journals

Many of the limitations of scientific knowledge about racial and ethnic disparities in health are associated with poor conceptualization of variables measuring race and ethnicity, illogical or crude classifications, imprecise terminology, and other methodological weaknesses. Despite these problems, race and ethnicity are prominent research variables in public health and medical science literature. Senior and Bhopal described four common characteristics of ethnic health research in the United Kingdom:

- unclear purpose for identifying race or ethnicity,
- inappropriate aggregation of heterogeneous racial or ethnic populations,
- imprecise measurement of race or ethnicity, and
- ethnocentric bias introduced by analyzing racial or ethnic groups from the perspective of the dominant culture.

Similar conceptual and technical criticisms have been made of US health research, with emphasis on...
invalid classification of race and ethnicity\textsuperscript{1,3,6-11} and lack of consistent terminology.\textsuperscript{12,14,16,17}

Greater agreement on concepts and terminology of race and ethnicity in health research is important for understanding racial and ethnic variations in mortality, morbidity, and utilization of health services. Race and ethnicity in the United States are often correlated with income and other measures of socioeconomic status (SES), but racial and ethnic health differentials are not wholly explained by SES.\textsuperscript{18,20} Common research instruments do not adequately measure the impact of current and historical discrimination and complex interactions between race/ethnicity and SES. More rigorous and consistent scientific standards for describing and analyzing race and ethnicity are necessary to improve research on social inequalities in health, develop public health practice to eliminate differentials, and ultimately achieve population-based public health objectives.\textsuperscript{1,22}

Leading public health and medical journals reflect and also influence research standards and practices. Writing on the use of race in medical research, Osborn and Feit\textsuperscript{7} urged the highest standard of scientific accountability for medical journal editors due to the consequences of their policies for medical decision-making and health outcomes. This article is based on the proposition that editors, editorial boards, and referees (whose functions collectively constitute the editorial process) are guardians of the quality of published research.

More than 500 journals adhere to the “Uniform Requirements for Manuscripts Submitted to Biomedical Journals” issued by the International Committee of Medical Journal Editors on a wide range of stylistic issues. In the “Methods” section of the recently issued 1997 version,\textsuperscript{23} authors are instructed to “Identify the age, sex, and other important characteristics of the subjects.” The following cautionary but brief guidance follows: “The definition and relevance of race and ethnicity are ambiguous. Authors should be particularly careful about using these categories.” This is the first time the Uniform Requirements have made any reference to race or ethnicity, but no explanatory details are given about the sources of confusion or appropriate criteria for racial and ethnic categories.

The \textit{British Medical Journal} recently published more substantial guidelines on the use of ethnic, racial, and cultural descriptions. Authors are urged to describe accurately the populations studied and to explain the logic of racial or ethnic categories as well as the criteria for classification.\textsuperscript{24,25} For example, “self-assigned as black Caribbean (Office of Population Censuses and Surveys category)” is cited as a group description more accurate than “black”; similarly, “UK-born individuals of Indian ancestry” or “French-born individuals of Vietnamese ancestry” would be preferable to “Asian.”\textsuperscript{24}

Bhopal et al\textsuperscript{26} in the United Kingdom called for debate involving editors on the issue of racial and ethnic terminology. Their survey of editors of British medical journals showed that few had formulated policies for their journals, but most were interested in the issues, recognized their importance, understood the difficulty of achieving precise terminology, and wanted to become involved in discussion.\textsuperscript{27} We conducted this survey because the extent to which editors of US health research journals have been involved in discussions of race and ethnicity is unknown, and no information is available on their journals’ editorial policies concerning race and ethnicity.

**MATERIALS AND METHODS**

Journals were selected from the “Public Health,” “General and Internal Medicine,” and “Health Policy and Services” headings in the 1994 \textit{Science Citation Index} and \textit{Social Sciences Citation Index} of the \textit{JCR Journal Citation Reports}.\textsuperscript{28,29} Final inclusion of 29 journals in the sample was determined by the following criteria:

- impact factor\textsuperscript{30} (ratio of citations divided by number of articles published) \(\geq\) 1,
- English language journal published in the United States,
- peer-reviewed journal, as determined by \textit{Ulrich’s International Periodicals Directory}\textsuperscript{31} or journal sources,
- journal publishing original research, and
- journal published at least quarterly.

A questionnaire with fixed-choice and open-ended questions was constructed around several themes, beginning with current editorial policies regarding race and ethnicity terminology and research. Editors were asked to estimate the frequency with which the problems emphasized by Senior and Bhopal\textsuperscript{15} occurred in manuscripts they received that related to race and ethnicity and to indicate their level of agreement with recommendations on uses of race and ethnicity in public health surveillance from a 1993 workshop sponsored by
the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) (Table 1).32

Another section asked about editors’ familiarity with Office of Management and Budget (OMB) Directive No. 15. In 1977, OMB issued “Race and Ethnic Standards for Federal Statistics and Administrative Reporting,” with the caveat that “These classifications should not be interpreted as being scientific or anthropological in nature.”33 The Directive was undergoing review by an interagency committee at the time of the survey, and final decisions on proposed changes (such as the creation of a multiracial category) were expected to be announced by the OMB in October 1997. Changes could affect census data collection, disease surveillance, and health research, and might require changes in the policy and style of health journals.34 Finally, respondents were asked about past practices and future plans related to editorial policies on race and ethnicity.

Four editors of three journals not included in the study sample were asked to test the draft questionnaire, and revisions were made based on their responses. After approval of the questionnaire and study protocols was obtained from the institutional review board of the university at which the researchers were based, the questionnaire was mailed to each editor-in-chief. A second copy was mailed to nonrespondents 2 weeks after the first. The investigators followed up by telephone with nonrespondents, and a final reminder letter and questionnaire were sent 2½ months after the first. Data were tallied separately and cross-checked by the investigators, who independently and then jointly identified major themes in the qualitative responses from the questionnaires and telephone transcripts.

**RESULTS**

Of the 29 mailed questionnaires, 23 (79%) were returned with responses completed for all or some questions. Of the 22 responses that were still coded on return, 13 were classified as public health journals, 7 as general and internal medicine journals, and 2 as health services research journals.

Of the six journal editors who did not complete the questionnaire, one mailed back a blank questionnaire with a note explaining that most of the questions did not apply to the journal. Three other editors commented on the phone that they had chosen not to respond; one of these three editors gave lack of time as the reason. Another stated that “We didn’t feel comfortable completing it...does not apply to us.” The third “felt that the questions were not wholly objective” and was “not sure these surveys are pertinent.” The two remaining editors did not respond to mailings or phone calls.

The six editors who acknowledged having editorial policies concerning race and ethnicity provided the following descriptions:

Race and ethnic identification are not used unless scientifically relevant. These issues are discussed and reported if their epidemiologic relevance can be established.

Good science, ethically conducted.

We attempt to be aware of the need to justify including this variable, potential confounding, criteria for defining and method for collecting data on this variable, and avoidance of the term race when possible and appropriate.

When racial or ethnic group assignment is a categorical selection variable or a categorical outcome variable, we expect authors to explain their group

<table>
<thead>
<tr>
<th>Table 1. Uses of Race and Ethnicity Data*</th>
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<tr>
<td>• Collect data on race and ethnicity when the data will be used to improve public health (eg, to assist in obtaining and targeting resources for affected communities)</td>
</tr>
<tr>
<td>• Despite the potential limitations of the categories of race and ethnicity, such information can assist in public health efforts to recognize disparities between groups for a variety of health outcomes.</td>
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<tr>
<td>• When possible, race and ethnicity data should be collected and analyzed in relation to potential intervening variables (eg, socioeconomic status)</td>
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<tr>
<td>• In all reports and other uses of surveillance data, the reason for analyzing race and/or ethnicity should be given, approaches to measurement of race and ethnicity should be specified, and findings should be interpreted</td>
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<tr>
<td>• The limitations of race and ethnicity data should be clearly stated and communicated to persons and organizations using the data</td>
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<tr>
<td>• Conduct analyses to document the effects of racism</td>
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assignment criteria and the means of application of those criteria.

We encourage submissions dealing with issues of race and ethnicity and from minority authors.

We wish to encourage both ethnicity-specific analyses and analyses stratified by ethnicity—and to have sample sizes that are sufficiently large to make such analyses meaningful.

Only about one quarter of the journals had any policies pertaining specifically to racial or ethnic terminology. One policy was stated as follows:

Any mention of race or ethnicity is deleted unless pertinent to the case or condition being discussed.

Another editor commented:

I and my copy editors strive for consistency, chiefly within a paper—we do not like to use “black” and “African American” interchangeably, as they can have different meanings depending on the sample. We try to use “race” and “ethnicity” accurately—distinguishing between races (black, white) and ethnicities (Hmong, Hispanic).

In the same journal, variations introduced by authors are accepted as long as the terms are internally consistent and conform with the terminology used to gather baseline data. For example, “calling US Census data on blacks that of African Americans is not acceptable.”

Various editors were concerned about clarity, consistency, and acceptability of terms to their readers. The style of one journal was to use “ethnic group” rather than “race.” One editor wrote, “I suppose we’d reject derogatory terminology, but the issue has never come up.” Another thought it possible, but was not certain, that the journal’s publisher had a standard style. One person responded that the question about specific policies was not relevant because “If race and/or ethnicity are appropriate variables for a given study, the authors are expected to define them as they would any other variable.”

Table 2 shows that the four problems described by Senior and Bhopal were perceived by most editors as uncommon in manuscripts they reviewed for their journals. Measurement problems were noted as frequent or usual by five respondents. Three editors cited inappropriate aggregation of heterogeneous populations as a common problem. None perceived frequent problems with unclear rationale or ethnocentric bias in manuscripts. Sixteen editors responded that they rarely perceived ethnocentrism; one of them did not think this type of bias could be assessed in a blind review process without knowledge of the authors’ race or ethnicity.

Editors indicated a high level of agreement with recommendations from the CDC/ATSDR “Workshop on the Use of Race and Ethnicity in Public Health Surveillance” (Table 3), although only three had previously seen the recommendations. Responses reflected strong agreement with the first
Table 3. Survey Questions and Responses on the Centers for Disease Control and Prevention (CDC)/Agency for Toxic Substances and Disease Registry (ATSDR) Recommendations, 1996

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree</th>
<th>No Opinion</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>No Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect data on race and ethnicity when the data will be used to improve public health (eg, to assist in obtaining and targeting resources for affected communities)</td>
<td>1 (4)</td>
<td>0 (0)</td>
<td>6 (26)</td>
<td>13 (57)</td>
<td>3 (13)</td>
</tr>
<tr>
<td>When possible, race and ethnicity data should be collected and analyzed in relation to potential confounding variables (eg, socioeconomic status)</td>
<td>0 (0)</td>
<td>1 (4)</td>
<td>6 (26)</td>
<td>13 (57)</td>
<td>3 (13)</td>
</tr>
<tr>
<td>In all reports and other uses of surveillance data, the reason for analyzing race and/or ethnicity should be given, approaches to measurement of race and ethnicity should be specified, and findings should be interpreted</td>
<td>0 (0)</td>
<td>3 (13)</td>
<td>8 (35)</td>
<td>9 (39)</td>
<td>3 (13)</td>
</tr>
<tr>
<td>The limitations of race and ethnicity data should be clearly stated and communicated to persons and organizations using the data</td>
<td>1 (4)</td>
<td>2 (9)</td>
<td>7 (30)</td>
<td>10 (43)</td>
<td>3 (13)</td>
</tr>
<tr>
<td>Conduct analyses to document the effects of racism</td>
<td>2 (9)</td>
<td>6 (26)</td>
<td>6 (26)</td>
<td>6 (26)</td>
<td>3 (13)</td>
</tr>
</tbody>
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*N=23.
†Percentages may not total 100% due to rounding.

In 1993, the CDC and ATSDR organized a Workshop on the Use of Race and Ethnicity in Public Health Surveillance. Please indicate your level of agreement or disagreement with the following recommendations that emerged from the workshop:

- Collect data on race and ethnicity when the data will be used to improve public health (eg, to assist in obtaining and targeting resources for affected communities).
- When possible, race and ethnicity data should be collected and analyzed in relation to potential confounding variables (eg, socioeconomic status).
- In all reports and other uses of surveillance data, the reason for analyzing race and/or ethnicity should be given, approaches to measurement of race and ethnicity should be specified, and findings should be interpreted.
- The limitations of race and ethnicity data should be clearly stated and communicated to persons and organizations using the data.
- Conduct analyses to document the effects of race and ethnicity.

Race and ethnicity were almost always flawed by inappropriate aggregation and imprecise measurement, were at variance with the views of most other editors (Table 2). This particular editor had drafted an editorial outlining a policy on race and ethnicity, and made the following criticism:

Many authors don't think about the imprecision of ethnic group assignment, and don't even know what I'm driving at when I raise the issue—needs a higher profile.

Few of the editors had discussed survey issues with co-editors (four editors), editorial boards (four editors), or reviewers (five editors). Editors were about equally divided between those who thought it would be beneficial to have more discussions on editorial issues related to race and ethnicity, and those...
who did not think so. Four editors stated they had plans to prepare policies on these issues, and one said an editorial already had been drafted.

DISCUSSION

Editors’ perceptions that the topics of race and ethnicity were not relevant to their journals and that problems related to race and ethnicity were not commonly encountered in research manuscripts do not accord with our assessment of the journals or with numerous scholarly critiques of the published health research literature. Most of the sampled journals publish studies of diverse racial and ethnic subpopulations, and race and ethnicity are frequently analyzed as variables.

Most editors perceived as uncommon problems that have been the focus of much scientific comment. Errors and inconsistencies in measurement and lack of definition of race and ethnicity have been demonstrated to be the rule rather than the exception in health research literature. Encouraging authors to submit analyses of race and ethnicity without evaluating their justification for such analyses may produce misleading results. While journals should be inclusive in their outreach to researchers, all authors should be expected to handle topics of race and ethnicity with scientific rigor regardless of their personal backgrounds. It is possible that editors’ perceptions may be due to their lack of awareness of these problems rather than the absence of problems in manuscripts.

The single editor whose views had been solicited by a federal agency on issues of race and ethnicity had markedly different views from other editors. This was the only respondent who was aware that Directive No. 15 was being reevaluated, and only two others had read the Directive; three editors had seen the CDC/ATSDR recommendations, which are applicable to research design, analysis, and presentation of findings. Moreover, respondents’ input had seldom been solicited. Thus, key challenges, such as developing a common vocabulary and improving racial classification systems, have not involved an important group: journal editors.

Editors expressed broad concurrence when presented with the principles emerging from the CDC/ATSDR workshop on race and ethnicity. The six journals reporting editorial policies were generally in conformity with the CDC/ATSDR recommendations, stressing the need to establish the scientific relevance of analyzing race or ethnicity, the definitions of terms, and the methods for data collection. Most of these journals attempted to eliminate the use of ethnic or racial categories unless it proved necessary, and the term “race” was sometimes avoided. “Ethnicity” was considered a more accurate and acceptable term, and at least one editor adhered to the distinction between “race” and “ethnicity” established by OMB Directive No. 15.

Accuracy of terminology was recognized as a key point by two editors who stressed the distinction between “black” and “African American.”

Six respondents stated they had no opinion about the recommendation to “conduct analyses to document the effects of racism.” Further investigation would be needed to determine whether the recommendation was clear to them or whether they were not familiar with the notion that racial discrimination acts as a health determinant. Despite broad support for the CDC/ATSDR recommendations, less than one quarter of respondents reported prior editorial discussion of race and ethnicity. Forty percent of responding editors perceived merit in wider discussion within their journals, but only 17% planned to prepare editorial policies. Thus, the survey stimulated thought and some intention to confer, but little resolve to develop journal policy.

Scientific journals should be concerned with the treatment of the concepts of race and ethnicity, which have been misunderstood and distorted in the biological, medical, and social sciences for centuries. The understanding and elimination of social inequalities in health requires rigorous research designed to illuminate the interactions between race, ethnicity, and socioeconomic status, and to explore the psychological and physiological impact of racial and ethnic discrimination. Unless scientific publications define race and ethnicity with greater care, are based on a rational consensus on classification of groups, and describe fully the nature of populations studied, their findings cannot be compared across time or place. Generalization is impossible without comparability, in which case the work is of minimal scientific value.

Editors’ organizations have accepted and acted on their responsibility to develop guidance on style. The International Committee of Medical Journal Editors has acknowledged the ambiguities regarding the definition and relevance of race and ethnicity. Such a warning without specific guidance may not help authors. The British Medical Journal’s recently published guidelines for research and publication on
ethnicity, race, and culture provide a starting point for further elaboration of the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals."

CONCLUSION
These findings document a disparity between the mounting scientific critique of health research on race and ethnicity and its impact on editorial policies and practices in this field. Journal editors should participate more in debates on the nature, value, and presentation of race and ethnicity research. While editors are not responsible for resolving the many thorny conceptual and methodological problems, they have an important role to play. Their involvement would enhance the scientific quality of research publications related to race and ethnicity and would stimulate researchers to hone their work. Recent decisions by the Office of Management and Budget affecting racial and ethnic data for federal reporting purposes were the culmination of 4 years of scientific research and public debate. Journal editors and their editorial boards should be actively involved in future considerations of policy on race and ethnicity terminology and research. The resulting dialogue between editorial staff, advisory boards, and researchers would improve public health research and practice.

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