Ethical Research and Minority Populations

Redressing Past Wrongs: Changing the Common Rule to Increase Minority Voices in Research

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Numerous diseases disproportionately affect African Americans across socioeconomic, age, gender, and geographic groups. Despite the need for research into these disparities, African Americans are often underrepresented in research. The Tuskegee Syphilis Study receives much of the blame for this problem, but other contributing factors have also been identified.

To date, government policies seeking to increase African American participation have had limited success, and recently proposed changes to the Common Rule do not address this problem. Therefore, we have proposed 3 changes: treating racial minorities as vulnerable, requiring community consultation in minority research, and increasing minority representation on institutional review boards.

Coupled with other efforts, these changes could help increase minority representation in researching health disparities. (*Am J Public Health.* 2013;103:2136–2140. doi:10.2105/AJPH.2013.301356)

AFRICAN AMERICANS ARE disproportionately affected by numerous diseases and health problems, such as high blood pressure, diabetes, obesity, low birth weight, and AIDS, and these disparities persist across socioeconomic, age, gender, and geographic groups.[1–3] Although research is needed to formulate effective and appropriate public health programs to respond to these health disparities, African Americans are often underrepresented in research.[4,5]

The mistrust engendered by the now infamous government-run Tuskegee Syphilis Study, which followed several hundred African American men with syphilis for 40 years, receives much of the blame for the underrepresentation of African Americans in research.[6] However, research abuses and African American mistrust of medicine did not start and end with the Tuskegee study. Stories of medical and research abuse circulating in the African American community date back to antebellum times.[7,8] More contemporary examples of questionable research involving African American populations include the EZ measles vaccine,[7] the Kennedy Krieger lead paint abatement,[9] and the polyheme synthetic blood[10] studies. Research has identified other factors besides mistrust that may account for underrepresentation, including provider biases and lack of access to care.[5] Despite disagreement about the exact causes of the problem, there is general agreement that the problem exists.[11]

To date, government policies, such as the 1993 NIH Revitalization Act (Pub L 103–43; 42 USC 289a-1), which mandated inclusion of women and minorities in research, and researchers' efforts to increase minority enrollment have had limited success.[12] The US Department of Health and Human Services 2011 Advanced Notice of Proposed Rule Making, which proposed several significant changes to the regulations governing human participant research for the first time in decades,[13] offered an opportunity to address the persistent underrepresentation of African Americans and other minorities in research; however, the US Department of Health and Human Services failed to address this important issue.

We believe that systemic changes to the research oversight system are a necessary, but not sufficient, factor in increasing this enrollment. Accordingly, we suggest that future efforts to amend the regulations explicitly require inclusion of minority voices for research focused on minority health issues. As a beginning point for further discussion of possible regulatory changes, we recommend that the Common Rule treat racial minority populations as vulnerable, require community consultation as part of the institutional review board (IRB) process for research involving minority populations, and increase minority participation on IRBs that evaluate such research. We believe that these recommendations, coupled with other efforts—such as increasing the number of minority physicians and researchers and involving minority communities in developing research questions through methods such as community-based participatory research—could address some of the identified barriers to greater research participation of racial and ethnic minorities and thus facilitate the research that is needed on the health issues that disproportionately affect African Americans.

The legacy of slavery, Jim Crow laws, and Tuskegee has focused

researcher attention on health disparities and underrepresentation of African Americans in research. Accordingly, we frame our discussion in the context of the well-documented African American experience, recognizing that similar experiences support expanding our analysis to other minority populations.

CURRENT RESEARCH OVERSIGHT STRUCTURE

The revelations of the Tuskegee study abuses led to the passage in 1974 of the National Research Act, which mandated that IRBs be established at all institutions receiving federal research grants (Pub L 93–348 §212; 42 USC 289 et seq.). IRBs are charged with protecting the rights and well-being of human participants by reviewing research protocols before they begin and at least annually thereafter (45 CFR 46.109) on the basis of requirements set forth in the federal regulations governing human participant protections (45 CFR 46 et seq.), often referred to as the Common Rule.[7,12] The regulations require, among other things, that informed consent be obtained from research participants, risks be minimized and be reasonable in relation to the anticipated benefits, and participant selection be equitable (45 CFR 46.111). The IRB is required to have at least 5 members, including at least 1 who is not affiliated with the institution and at least 1 "whose primary concerns are in nonscientific areas" (45 CFR 46.107). Although the regulations require members who are familiar with certain vulnerable populations, such as children and prisoners, there is no requirement that members have expertise in communities that are underrepresented in research (45 CFR 46.107).

SUGGESTED CHANGES

The underrepresentation of African Americans in research results from experiences with and attitudes toward the medical and scientific establishments that are complex, multifaceted, and derived from more than 2 centuries of discrimination.[7,8,12,14,15] Therefore, remedying this problem will require a deliberate, sustained, and multifaceted approach to effect lasting change. We focus on how changes to the Common Rule could play a role in addressing this problem.

In particular, we contend that several regulatory changes, which could help address the disparities in research participation, merit further consideration. These include treating any group as vulnerable that medical or public health authorities have historically abused; requiring community consultation for research involving minority groups, especially those who have been vulnerable historically; and changing the regulations regarding the composition of IRBs to ensure more minority participation in IRB decisions.

Vulnerable Groups

The Common Rule currently requires IRBs to consider

> when some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of these subjects (45 CFR 46.111(b)).

Subparts B, C, and D of Department of Health and Human Services regulations (not part of the Common Rule) specify special procedures for research involving pregnant women, prisoners, and children, respectively. This approach to vulnerable groups could be used to provide additional protections to historically persecuted minorities, such as African Americans. In making this suggestion, we are cognizant of the risks of reinforcing historical stereotypes by treating African Americans as vulnerable rather than redressing prior wrongs, as we intend. The additional protections must make clear that the vulnerability stems from historical mistreatment—by law, experience, or both—rather than a characteristic of the group. In this way, the protections are similar to those imposed on prisoner research, which recognizes that incarceration creates the vulnerability, not the capacity of the individuals. That members of racial minorities often identify minority status as a cause of vulnerability suggests that this approach may be acceptable to them.[16]

This expansion of protections, coupled with the other changes we suggest, could help alleviate the problem of underrepresentation in researching diseases disproportionately affecting African Americans in several ways. Considering the historical failure of law and medicine to protect African Americans against various abuses,[14] additional protections would, at a minimum, demonstrate the seriousness of government efforts to prevent further research abuses.[17] Laws have important symbolic value and the power to influence social norms[18,19]; therefore, treating racial minorities as a vulnerable population not only could serve as a long overdue acknowledgment of the past harms that African Americans have suffered in the research environment but also could improve relations and trust between African American communities and research institutions and lead to increased participation. In addition to this expressive function, our suggested change would require IRBs to address the specific concerns of local populations in their review and ensure that appropriate safeguards are in place.

Despite these possible benefits, great care must be taken not to stigmatize minority populations by treating them as potentially vulnerable. Such stigmatization would defeat the purpose of the proposed change and could exacerbate existing problems. For example, well-intentioned efforts in the 1970s to address the problem of sickle cell anemia among African Americans had the unfortunate consequence of stigmatizing those with the sickle cell trait who did not have the disease and often prevented them from getting benefits such as life or health insurance.[20] Although difficult, it is possible to study a disease affecting a minority group

without stigmatizing its members, as research into Tay-Sachs disease—which primarily affects Jews—has shown.[20] The risk of stigmatization could be mitigated by coupling the treatment of historically persecuted minorities as a vulnerable group with a requirement to consult with them when designing research protocols. In fact, such a coupling could result in substantial improvement in the relationship between minorities and researchers.

Community Consultation

There are several reasons to consider requiring community consultation when research focuses on minorities such as African Americans. Such a change could increase participation in research and mitigate the stigma that could come from being labeled vulnerable. In addition, it would be in accordance with the NIH Revitalization Act of 1993 (Pub L 103–43; 42 USC 289a-1), which required minority inclusion in research and placed responsibility on investigators for understanding and responding to the attitudes and beliefs of potential research participants.[21] What better way to understand and respond to their beliefs than by consulting with members of the group from which research participants will be drawn? In fact, community consultation is already required with the emergency research exception to consent (21 CFR 50.24(a)(7)) and could be extended to all human participant research involving historically vulnerable minorities by adding a similar requirement to 45 CFR 46.

However, this requirement would be in addition to, not in place of, individual participants' informed consent. The goal is to ensure that researchers take into account the sensitivities of particular communities, which may identify different research risks and benefits from the researcher; therefore, the protocol will be as the communities in which the research is conducted inform.[22] Requiring community consultation with historically vulnerable minorities, derived from the principles of significant involvement and functional relevance, could also help to increase trust between the African American community and researchers and thereby increase African Americans' participation in research that better targets community concerns.

However, community consultation would not be a panacea for protection of African Americans or other historically abused minorities and thus may not increase trust. Ironically, the Tuskegee study itself involved extensive public health service scientists' efforts to involve African Americans in their research protocol: the prestigious Tuskegee Institute was sought as a partner in the research and an African American nurse, Eunice Rivers, was recruited to assist researchers and gain the trust of the study participants.[12,14] Including these community members, however, did not protect the participants. Furthermore, the concept of community is vague: the current Food and Drug Administration regulations do not clearly define how a community should be consulted or whom to consult.[10,23]

Despite these shortcomings, there are examples of successful community consultation that could serve as models for the required consultation we envision. HIV researchers have relied on community advisory boards in protocol development to increase retention and recruitment and strengthen partnerships between participants and researchers.[24] Cancer patient advocates have worked with scientists to design cancer research protocols that address patient concerns.[25] Furthermore, community-based participatory research has been embraced as a means of increasing the involvement of minority communities.[26]

Therefore, some type of community consultation could be used effectively to ameliorate the concerns of minorities about participating in research and could be essential in avoiding the marginalization of groups, such as African Americans, who have been historically disadvantaged and underrepresented in research.[23] Two principles that should guide IRBs in deciding whether adequate community consultation has occurred are significant involvement and functional relevance.[20] According to King,[20] significant involvement means that the members of the study group have a central role in the entire research process; functional relevance dictates that research promote the needs and perspectives of the study population. These principles ensure that research participants have power and influence over research methods and agendas[20] and were clearly not present in the Tuskegee study's collaboration with members of the African American community. Any community consultation requirement should be derived from these 2 principles, and corresponding guidelines should use them to guide IRBs in determining whether adequate consultation has taken place. However, the impact of these proposed changes cannot be realized without more concerted efforts to increase minority representation on IRBs.

Institutional Review Board Composition

The current regulations governing the membership of IRBs require IRB members to be situated to consider issues of race, among other things:

> The IRB shall be sufficiently qualified through the experience and expertise of its members, and the diversity of the members, including consideration of race, gender, and cultural backgrounds and sensitivity to such issues as community attitudes, to promote respect for its advice and counsel in safeguarding the rights and welfare of human subjects (45 CFR 46.107(a)).

However, this language has not resulted in substantial minority representation on IRBs. According to a 1995 survey of 129 IRBs, 66% of IRB members were men and 90% were White; in addition, many minority members felt that their concerns were not taken seriously.[27] More than 10 years later, not much had changed. According to a similar survey by Catania et al.,[28] although 50% of IRB members

were women and 14% were of some ethnic minority, almost a quarter of IRBs had no minority representation at all. Considering that 18% of the faculty members of the institutions surveyed were non-White,[28] the composition of these IRBs is not representative of the demographic profile of these institutions and leads us to wonder whether they really could be representative of their wider communities.

Considering this lack of minority representation, it is doubtful that an IRB reviewing a research protocol involving African Americans, or any minority, could really understand the concerns or experiences of that community. For example, the Kennedy Krieger lead paint experiments in Baltimore in the 1990s triggered much debate in the literature over the ethics of those experiments but without any mention of what such experiments might mean to African Americans in light of their history with medical and scientific research.[9] The failure of researchers to disclose lead paint exposure to protect African American children is judged in the context of these experiences, but it seems that scientists do not fully understand the concerns of the African American community.

Therefore, it appears obvious that more minority representation on IRBs is crucial to address minority concerns and foster trust in the research oversight system. Nevertheless, the best method of doing so is not clear. It might be possible to require that IRBs be composed of more members and that they demographically represent the community around them or that additional members from the community be added when research is proposed involving a historically vulnerable population. Unfortunately, there is no guarantee that greater minority representation would equate with greater influence as studies on community representation on IRBs have shown: Sengupta and Lo[29] found that nonscientific members of IRBs often feel intimidated, and Candilis et al.[30] found that these members speak up much less often than do their scientific counterparts. However, these difficulties can be overcome. For example, the Department of Defense, as part of its congressionally directed medical research program, has a history of involving lay persons in scientific review of research protocols.[25,31] Both scientist and nonscientist members of breast cancer research panels have expressed satisfaction with their involvement.[31] Therefore, we believe the practical difficulties of increasing active minority participation and influence on IRBs can be overcome and should be considered in future rulemaking processes.

CONCLUSIONS

The regulatory changes we have outlined are imperfect and would not be enough by themselves to increase research participation among African Americans. However, they may be a mechanism for changing research oversight that could result in systemic change and complement other efforts to address this problem. The current Advanced Notice of Proposed Rule Making seeks to address a wide variety of problems with the Common Rule[13] but completely misses the opportunity to address the continuing and ever more germane underrepresentation of minorities in research.

This oversight on the part of the Department of Health and Human Services can be seen as further evidence that those in the research community do not understand or appreciate the experiences of African Americans in medicine and research despite years of research documenting persistent disparities. To put it colloquially, they just don't get it. This general disconnect is reflected in the responses to studies, such as the polyheme (synthetic blood) studies under the emergency exception to consent,[10] the Kennedy Krieger lead paint studies,[9] and others subsequent to Tuskegee that are ethically suspect. Much of the debate in the literature addressing the ethics of those protocols focused on regulatory exceptions to informed consent and not on the historical and ongoing discrimination against African Americans, what that experience means for research recruitment, or how those studies might have further exacerbated the problem of their underrepresentation in research by reinforcing negative experiences with medicine and research.

Because of the growing problem of AIDS and chronic noncommunicable diseases among African Americans, it is time that those involved in human participant research address the barriers to research participation in the African American community that continue to limit our ability to study these diseases that disproportionately affect them.

A discussion of the 3 suggested reforms that we have outlined would be a good beginning point for addressing this problem. Treating historically persecuted minorities, and thus African Americans, as a vulnerable population would acknowledge and partially address the medical and public health establishments' historic mistreatment of them. The concept of community consultation holds promise for further involving African Americans in research and building trust between them and researchers. Finally, making IRBs more racially representative of the communities they serve would give minorities more input into the research projects that affect them. Although some of these proposals could be incorporated into current IRB practice, achieving long-term, widespread improvement in minority participation in research requires more systemic change. Accordingly, any proposals to change the regulations that make up the Common Rule should consider these suggestions. ■

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W. C. Rencher conceptualized the idea, conducted the background research, and took primary responsibility for drafting the article. L. E. Wolf provided substantive guidance in the development of the article and revised drafts for important intellectual content. Both authors are responsible for the final version of the article.

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