

GUIDELINES FOR CONDUCTING AN EQUITY REVIEW

Statement of Purpose

The purpose of this guideline is to provide direction to authors, reviewers, and editors seeking to apply a health equity lens in reviewing manuscripts for journals in nursing and related health disciplines. It identifies critical elements of papers that disrupt harmful scientific narratives and present data using inclusive equity communication principles. Unless scholars use a health equity lens informed by inclusive principles, the scientific and professional (and lay or popular) literatures are at risk of creating or perpetuating unjust systems, structures, mental models, and practices.¹ When the peer-reviewed literature promotes inclusive and equitable dissemination of knowledge, deeper understandings of health phenomena can lead to new interventions and treatments, and current treatments and approaches that are less effective or even harmful to minoritized groups are questioned and revisited.² Ultimately, equitable and inclusive review promotes the growth of an evidence base that improves individual and system outcomes and ultimately reduces inequities.

This guideline is not intended to rate papers or provide prescriptive guidance. Instead, it describes a series of focused questions aimed at revealing the assumptions that authors, because of their biases – implicit or explicit, make when planning, executing, and synthesizing their findings. Reviewers and editors who evaluate submitted papers without an inclusion and equity lens, particularly a lens that considers racial equity, may accept writings and reports uncritically and may, in turn, support and advance misinformed positions or arguments that advance systemic racism and oppression and perpetuate health inequities.

Reviewer's positionality: Researchers, clinicians, and reviewers have identities and lived realities that shape their understandings and interpretations. Because of this, reviews, if ever, are rarely value-free. A reflection on positionality is an important part of undertaking a bias-free review. Taking stock of positionality requires understanding how “one’s position in the social hierarchy vis-à-vis other groups potentially ‘limits or broadens’ one’s understanding of others.”³ It is important that reviewers intentionally reflect on their identity, life history, experiences, theoretical beliefs, privilege, and values that might create biases in their view or interpretation of a manuscript. A good place to start for reviewers or editors is to think about their own identity (e.g., age, gender, sexuality, ethnicity, social class, disability status, religion); consider the lens through which they view the world (political, philosophical, and theoretical beliefs), and reflect on what they believe about social processes (language, power, inequity).

The following guideline is intended to be an integral part of the peer review process. This guideline follows the experimental/nonexperimental study design but can easily be adapted to fit any study design.

	Item No	Recommendation	Reviewer Comments
Title and Abstract			
	1a	<p>Is the title and abstract reflective of equity-focused, person-first language. It isn't possible to list all the "right" ways of using language because language and culture are fluid. It is the author's responsibility to stay current on the language of identity and inclusion. Using an incorrect term or word can be insulting or disrespectful; even if the author didn't intend to cause harm, it's the impact that matters. Consult the journal instructions for authors or a best practice document for current recommendations.⁴</p>	
	1b	<p>In the title, abstract, and the entire paper, language, formulations, and tropes that perpetuate stereotypes or harm (i.e., racism, sexism, ageism, ableism, heterosexism, transphobia and classism) must be avoided. Examples include sex workers grew up poor and had a lack of parenting, or immigrants are primarily responsible for the steep rise in crime. Gay men are responsible for the HIV crisis.</p>	
Introduction			
Background/ Rationale	2	<p>The background should provide the historical context of the phenomenon under investigation. The reviewer should assess whether inequities and their root cause should be considered in the background section.</p> <p>For example, in a study that examines maternal outcomes, do the authors discuss in the background and identify gaps within the context of known or suspected upstream factors (e.g., racism) and or structural determinants of health (e.g., access to care, being unhoused) that explain the differences in maternal outcomes? For example, in a study examining the impact of environmental policies on urban air quality and children's health, the authors should discuss known or suspected upstream factors, such as the proximity of industrial zones to low-income residential areas and the impact of vehicular emissions in densely populated urban settings. The background should address how sociopolitical drivers of inequities like socioeconomic status, residential segregation, and access to healthcare contribute to disparities in respiratory health outcomes among children in urban environments.</p>	
Objectives	3	<p>Examine the study's specific objectives or hypotheses. Note any objective or hypothesis that compares the health of racial groups (e.g., Black nurses to White nurses). If present, is there a valid reason for comparing the health of racial groups? Does the objective/hypothesis imply that differences in health may be due to biological or behavioral/social deficits of one racial group over the other (e.g., a study that compares the physiology of IV insertions in Black patients relative to their White counterparts)?</p> <p>Studies designed to compare the health of racial groups should include an examination of the relevant social, structural, and/or racial inequities and acknowledgment that race is not a biological factor.^{1,5}</p>	

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Methods			
Study Design	4	<p>Was the study design informed or co-created by the population being studied, and does the researcher note this in the method section? Patients, family members, community-based health advocates, and practitioners can help teams understand how racism appears in clinical care.⁶</p> <p>Patients, family members, community-based health advocates, and practitioners can help teams understand how best to carry out the study's design in an equity-minded way.⁷</p>	
Setting	5	Do authors discuss ways to enhance inclusivity for study participants? Are culturally and structurally relevant recruitment practices employed to make participation accessible to populations that experience inequities (e.g., transportation, interpretation services, and community outreach, etc)?	
Participants	6a	<p>Are participants representative of the population described in the research questions?</p> <p>Did the researcher consider cultural, linguistic, and socioeconomic covariates (e.g., examine the demographic table for important covariates)? Is the author justified in not examining covariates? Is this explicitly discussed?</p>	
	6b	Does the author justify the choice of comparison and/or reference groups? Is there a scientific rationale for the chosen reference group?	
Variables	7	If variables such as race, ethnicity, language, sexual orientation, economic status, etc., are used to identify groups that experience inequities, do the authors state that the characteristic is a proxy for an oppressive/discriminatory practice or structure? If an inequity is identified, do the authors state the actual cause of the inequity instead of presenting identity as a risk factor (i.e., people who experience racism have higher rates of XYZ, instead of people who identify as Black...)?	
Data sources/ Measurement	8a	Does the author indicate how race <u>or ethnicity</u> is measured in the data and, if applicable, acknowledge its limitations as a valid measure? The best practice is for participants to self-identify their race and ethnicity. ^{8,9}	

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	8b	<p>Does the author(s) use <i>race</i> as a proxy for variables such as ethnicity, culture, skin color, discrimination, genetic markers, or racism. <i>Race should never be used as a measure in these cases.</i> There are valid measures for each of these variables. For example, some clinical guidelines and diagnostic tools have historically used race to estimate kidney function. The estimated glomerular filtration rate (eGFR) calculation often includes a race coefficient, which assumes that Black patients have higher muscle mass and, consequently, higher creatinine levels^{10,11,12}. This practice uses race as a proxy for physiological differences, including skin color, but has been criticized for its lack of precision and potential to perpetuate health disparities^{10,11,12}.</p>	
Analytical Bias	9	<p>If the authors hypothesized different outcomes for different racial or ethnic groups, was the study designed with statistical power considerations, and were there sufficient subjects in the final analyses to yield valid conclusions? Extreme caution should be exercised when subgroup comparisons are conducted and interpreted outside of population-based surveys.</p>	
Sample Size	10	<p>Observe for frame error which can result in biased sample selection, where certain segments of the target population are overrepresented or underrepresented in the sample. This can distort the study results and compromise generalizability. In short, frame error disrupts equitable sampling processes and introduces biases that affect the validity of the findings. Suspect frame errors in small sample sizes which restricts the ability of researchers to measure disparities appropriately.</p> <p>If sufficient samples could not be attained, does the author explain this in the limitations section? The author must be careful in drawing conclusions about race or populations based on inadequate sampling.</p>	
Statistical Methods	11a	<p><i>Race as a predictor variable:</i></p> <p>Consider the implications of “controlling” for race in statistical analyses.</p> <p>What is implied in an analysis that controls for race is that inequities in outcomes are due to biological differences rather than the social and structural factors imposed by racism.</p> <p>This type of analysis is important for documenting health disparities, but it will often fall short of explaining a health inequity, which is the underlying cause of the disparity.</p>	
	11b	<p><i>Race as a reference group:</i></p> <p>Do people who identify as White, or part of the culturally dominant group (i.e., cisgender or heterosexual people) serve as the reference group by which all other racial and ethnic groups are compared? for example, in a logistic regression analysis (where odds ratios are reported)?</p>	

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		<p>Although choosing the reference category may seem arbitrary, the selection of reference category foregrounds some contrasts over others. Also, selecting a culturally dominant group as the reference can subtly reify the notion that dominant groups are the most “normal.” This type of normalization process contributes to the construction of social differences and inequity.¹³</p> <p>If the categorical variables are all similar and the meanings ascribed to the categories do not provide a rationale for choosing a particular reference, best practice recommends relying on the coefficients to order the variables.</p> <p>Arranging with positive coefficients first, followed by negative coefficients¹³.</p>	
Results			
Participants	12a	<p>Does the presentation of data engage in racialisation? This is the process of assigning social and political significance to differences between human identities.¹⁴</p> <p>Racialization occurs through the stratification of health data by racial categories, which is not a benign act and must be justified in the background/rationale section. Without such justification, presenting data in this way can promote the belief that differences in outcomes are caused by biological rather than social and structural factors.⁶</p> <p>For example, an example of racialization through the stratification of health data by racial categories can be seen in the analysis of maternal mortality rates in the United States. Studies often stratify data by race to highlight disparities, showing that Black women experience significantly higher maternal mortality rates compared to White women.¹⁵ This stratification can inadvertently reinforce racial stereotypes by attributing health outcomes to racial categories rather than addressing underlying social determinants of health, such as access to quality healthcare, socioeconomic status, and systemic racism.</p> <p>Consider if the authors can avoid racialization by stating that racial identity is a proxy for racism, or by stating the actual cause of the inequity instead of presenting racial identity as a risk factor.</p>	
	12b	<p>Examine the efforts at recruitment – were important participants excluded?</p> <p>Was there representativeness across multiple categories – sexual orientation, income, immigration status, insurance coverage, language?</p>	
	12c	<p>When race is included as a research variable, did study participants self-select/self-identify? Did researchers provide options (e.g., free entry or fill-in option) for participants to select more than one ethnicity, including options for national, tribal, or ethnic origin?</p>	
	12d	<p>Does the presentation of race-based categories in a table consist of White participants listed first? The best practice is to list categories alphabetically.⁸</p>	

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	12e	Did the author collapse categories of race with disparate health outcomes? This is another way by which systemic racism gets masked. Collapsing racial categories with very different risks of health outcomes can obfuscate exposure-outcome relationships, resulting in a lack of attention toward the needs of those racialized communities. ¹⁶	
Descriptive Data	13a	If race categories are collapsed, consider labeling the collapsed categories in descriptive terms rather than “other.” The original purpose for racial categorizations was for “othering” or distinguishing “us” from “them.” In statistical analyses, the “other” group is often ignored, forego interpretation of results. Consequently, strong differences for the “other” group may not be discussed. ¹⁶	
	13b	Race, ethnicity, or culture should be used with caution as predictive and explanatory variables in health research. Studies that infer that certain health behaviors or outcomes differ by race, ethnicity, culture, or degrees of acculturation may be misleading because they rarely account for the distinct differences within racial or ethnic groups or cultures.	
Main Results	14	<i>Intentionally blank</i>	
Discussion	15a	Consensus is that race has no biological basis ⁵ . Does the author imply that race is an important cause of health inequities, rather than focusing on the specific causal factors that shape racial inequities in health?	
	15b	Are findings that demonstrate an inequity presented in a way promotes action to address the inequity? Authors must move beyond simply noting disparities. When disparities are noted, the authors should focus on uncovering the context for and systemic causes of inequities.	
Other Analyses	16a	Did the authors use a clinical algorithm with a race-based correction? These calculators and guidelines can lead to unfair or inequitable treatment for marginalized groups. If possible, race shouldn't be used as a predictor of disease.	
	16b	Did the authors use artificial intelligence in any part of the manuscript or figures? If yes, consider inherent biases. AI can introduce biases in the data it was trained on.	
Limitations	17a	Does the limitations section adequately address and engage with the discourse on achieving health equity. ¹⁷ If participants from non-dominant identities are underrepresented, do the authors explain why and how this limits the interpretation of findings?	
	17b	Could the findings be misinterpreted and promote blame narratives or the idea that inequities are indelible (greater risk when data focuses on biological markers or individual behavior)? ⁷	
Interpretation	18a	Are the structural factors such as social drivers of health that impacted the findings addressed?	

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	18b	Have the authors reflected on their study findings in the context of foundational research and literature authored by people with lived and learned expertise in the field of study?	
Other Considerations	19a	Consider the impact of power differentials between the researchers and participants. It is important to consider that power may influence or bias people who possess it. In many of these relationships, more powerful individuals influence the well-being of less powerful individuals, placing those less powerful individuals in vulnerable positions. Also, consider that perceptions of an environment can influence participant behavior or responses (e.g., research conducted in an academic setting vs. the person's home).	
	19b	If published, is there potential harm in producing knowledge that furthers racism and colonialism and/or negatively impacts the communities that enabled the research in the first place. ⁷	
Funding	20	Does the funding agency promote anti-egalitarian principles and ideologies or misuse science to justify discrimination or misinformation?	

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