

Measuring Masculinity in Research on Men of Color: Findings and Future Directions

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The purpose of this study was to examine the association between masculinity and the health of US men of color aged 18 years and older. We identified 22 population-based studies that included a measure of masculinity and a measure of health behavior, mental health, or physical health. The associations between masculinity and health were complex and varied by construct and health outcome, though they generally were significant in the hypothesized directions. Future research should explore the centrality of masculinity versus other identities and characteristics, how the relationship between masculinity and health varies by health outcome, and the identification of the conceptions and aspects of masculinity that are most relevant to and associated with specific health behaviors and health outcomes. (*Am J Public Health*. 2012;102:S187–S194. doi:10.2105/AJPH.2012.300715)

Since the 1970s, US-based studies of men have focused primarily on identifying the main elements of masculinity and then quantifying the extent to which these elements are present in individual men.¹ Early work examining the relationship between masculinity and health was dominated by the assumption that biological sex played a primary role in determining health behaviors, but recently scholars have paid increasing attention to the health implications of gendered expectations and normative gender roles on men's health.^{2,3} Although conceptual papers and qualitative studies have explored how gender and masculinity may affect men's health,^{3–8} what remains unclear is whether there is a relationship between existing measures of masculinity and health behaviors or health outcomes for men in general and men of color.

Men's health includes 4 general areas: (1) conditions that are unique to men, (2) diseases or illnesses that are more prevalent in men, (3) health problems for which risk factors are different in men, and (4) health issues for which different interventions to achieve improvements in health and well-being at the individual or the population level are required for men.⁹ Men's health issues may arise from physiological, psychological, social, cultural, or environmental factors.¹⁰ Generally, health-promoting behaviors are associated with

femininity and health-harming behaviors are linked with masculinity; thus, men's adherence to masculine ideals are theorized to contribute to the disparity between men's and women's health outcomes.^{3–5,11,12} Men often will prefer to risk their physical health and well-being rather than be associated with traits they or others may perceive as feminine.¹³

The study of masculinity and health has primarily explored the role of gendered influences on men's health,¹⁴ yet we still know relatively little about specific social-biological pathways through which gendered arrangements become embodied as differences in health among men or between males and females.¹⁴ Gender is the complex array of social relations and practices attached to biological sex that are rooted in biology and shaped by environment and experience.^{13,14} Although men's health is rarely deconstructed through this lens, gender is one of the most important social determinants of health and health-related behavior.^{13,15} In the context of public health, men's self-representation, internalized notions of masculinity, masculine social norms, and gender pressures are often implicated in explanations of men's premature death related to stress and unhealthy behaviors (e.g., reckless driving, alcohol and drug abuse, risky sexual behavior, high-risk sports and leisure activities).^{16,17} There is a need for public

health research that is gender-sensitive to men's lives and masculinities in relation to health and illness,¹³ which may come through understanding the relationship between masculinity and diverse aspects of men's health.

Within any society, there can exist a hierarchy of masculinities that are compared with a dominant or hegemonic ideal.¹¹ In the United States, the normative form of hegemonic masculinity is defined by race (White), sexual orientation (heterosexual), socioeconomic status (middle class) and the possession of certain traits: assertiveness, dominance, control, physical strength, and emotional restraint.^{14,13} Engaging in positive health behaviors and being rational, decisive, and making autonomous decisions also may draw on hegemonic ideals of masculinity.¹⁸ Although it is useful to determine whether men adhere to hegemonic ideals of masculinity, hegemonic masculinity does not have the same meaning and influence within and across men's lives. Engaging in positive health behaviors and being rational, decisive, and making autonomous decisions also may draw on hegemonic ideals of masculinity.¹⁸ Understanding the relationship between masculinities and health requires a framework that accounts for both individual agency in making health choices and the social structures that shape health behaviors and health practices.^{1,18}

There is a need to conceptualize masculinity as a structural characteristic and measure it as an individual-level experience that is varied in how it is understood, experienced, and practiced daily.¹⁹ Few studies have examined the strategies men of color use to negotiate masculinities in their everyday lives. Although they will accept that there are culturally dominant masculine ideals, their everyday experiences are not consumed or necessarily experienced as being subordinated; on the contrary, they often experience their masculinities as dominant in relation to other men's

masculinities while simultaneously challenging hegemonic masculinity.²⁰ Men of color will, however, negotiate masculinity by drawing on fragments or pieces of hegemonic masculinity for which they have the capacity to perform,²⁰ and they may piece together aspects of masculinity to establish their own standards and meanings of masculinity. These men may respond to a masculine ideal by reformulating it, shaping it along the lines of their own abilities, perceptions, and strengths, and then defining their manhood along these new lines. This way, they are able to feel that their masculine identities are valid in the context of their everyday lives.²⁰

Measures of masculinity serve as the operational definitions of masculinity in empirical studies.¹ It is critical to assess how we have operationally defined masculinity in men's health, because it helps to determine how well we have captured the constructs that are relevant to health. Measures of masculinity tend to define masculinity as residing within individual men or the US culture in 4 key areas: male norms, role conflicts and stressors, masculine conceptions and ideologies, and machismo.

Measures of male norms assess the degree to which men agree or disagree with an array of dominant cultural norms of masculinity in the United States.^{21–24} Measures of masculine conceptions or ideologies examine the degree to which men feel that they are able to fulfill a single form of stereotypically masculine roles.²⁵ Measures of gender role conflict or stress assess ideologies and beliefs about the meaning of being male and the extent to which one endorses or internalizes cultural norms and values of masculinity and the male gender role.²⁶ Machismo is operationalized as a combination of traditional, hypermasculine traits (e.g., dominance), nurturing qualities, and family centeredness.²⁷ Critics have argued that these measures are limited and do not consider

1. developmental or contextual issues;
2. how masculinity is related to desirable as well as undesirable behaviors;
3. how masculinity resides within social, cultural, or structural factors;
4. how there is diversity in the relevance of notions of masculinity for men; or

5. allowances for multiple masculine forms or masculinities.¹

These factors are particularly important aspects of the relationship between masculinity and health for men of color.

Masculinity is often defined in relational terms as that which is not feminine,^{13,28} and theories of masculinity have historically presumed that there is a single, universal masculinity. Masculinity has primarily been operationalized and studied as though it resides solely in each man's individual psychology.²⁹ Masculinity, however, is often signified by beliefs and behaviors that are practiced in everyday social and cultural patterns, practices, interactions, and relations.^{1,29,30} Because the social and cultural roles, expectations, and norms of those who are biologically male are fundamentally shaped by race, ethnicity, and class,³¹ it is critical to examine how these socially defined characteristics shape men's health and influence the mediating and moderating role of masculinity.³²

In literature on men's health, men of color have largely been invisible.¹⁵ Men of color account for much of the reported sex difference in mortality globally,^{4,29} but their health and health care are overlooked, not prioritized, and not considered an area of focus in many countries.³³ In the United States, the racial, ethnic, and socioeconomic disparities that exist among men highlight the need to pay greater attention to health disparities between groups of men.³⁴ Whether a person is perceived to look male or female by others evokes a constellation of gendered social expectations, responsibilities, and obstacles.³² Gendered processes—social relations and practices associated with biological sex—that affect men's health are based on arbitrary historical and ideological processes linking male genital anatomy, gender identity, and social arrangements of authority and power, despite the fact that these factors have no intrinsic relationship.¹³ Gender identities, roles, and relations mediate men's health behaviors and practices.^{3,7,18}

It is critical to examine how sex and gender intersect with other aspects of men's identities and experiences to accurately explain the health behaviors and health outcomes of men of color. Men of color may construct their identities and notions of masculinity in an effort to fulfill certain roles in relation to their

spouses, children, other family members, or to remain accountable to other men.^{35,36} African American men, for example, have conceptualized being healthy as being able to fulfill social roles, such as holding a job, providing for family, protecting and teaching their children, and belonging to a social network.³⁷ For men of color who belong to sexual minority groups, constructions of masculinity are further complicated by comparisons and expectations across lines of sexual orientation.^{28,38,39} Research has illustrated that men's identities are more complex than what would be captured in quantitative studies that simply add the effects of race, ethnicity, class, sexual orientation, and other socially constructed characteristics; the identities of men of color intersect and create unique masculinities.^{15,40}

Race and ethnicity represent broad structural forces that fundamentally shape historical and current economic and social opportunities that map on to cultural factors, social practices and institutional policies that affect men's health.⁴¹ Most measures of masculinity were developed and normed based on predominantly White, student-based samples; thus, generalizing from these study populations to men of color can neglect, miss, or misrepresent myriad external and situational factors that shape the lives and expressions of masculinity of men of color.⁴²

To date, there has not been a review of the literature that appraises the associations between masculinity and health for men of color. Therefore, the purpose of this study was to examine gaps in the literature on masculinity and the health of men of color. We reviewed the evidence for an association between measures of masculinity and the health of men of color in population-based studies, and included a broad range of health outcomes and racial and ethnic populations. We focused solely on men of color in the United States because race and ethnicity are social determinants that shape life chances, access to opportunities and resources, masculinity, and men's health behaviors and health outcomes.

METHODS

With the assistance of an expert reference librarian, we conducted searches in PubMed and

PsycINFO using a combination of keywords and subject terms in each database to examine associations between measure of masculinity and the health of men of color aged 18 years and older. Searches were limited to English language and peer-reviewed journals. When possible within a database, we restricted the search by age categories and male sex. After initially identifying potential articles that met our search criteria, we searched the full text of the articles to confirm that the paper met our inclusion criteria.

To identify measures of masculinity, we used search terms such as *masculinity*, *male identity*, *gender identity*, *sex roles*, *manhood*, *macho*, *male*, and *men*. These concepts of masculinity were combined with terms relating to health outcomes and health behaviors such as *behavior*, *health behavior*, *health outcome*, *stress*, *psychological*, *strain*, *coping*, *scales*, *measures*, *instruments*, *questionnaires*, *psychometrics*, *empirical research*, *evaluation studies as topic*, and *research design*. With each database query, we reviewed abstracts and articles that met our search criteria for studies that assessed physical health, mental health, and health behaviors.

We defined physical health as the overall health of the physical body, free of disease and abnormality. We defined health behaviors as actions taken by a person to prevent illness, reduce health risks, and obtain or maintain good health. We defined mental health as a state of well-being where one realizes his or her own abilities, can cope with normal life stressors, can engage in work productively and fruitfully, and is able to contribute to his or her community.⁴³ We excluded qualitative studies, studies with adolescents, research conducted outside of the United States, and studies pertaining to gender identity disorder or intimate partner violence. We also excluded studies where the sample was more than 75% White or the study participants were in institutions or intensive or residential substance abuse treatment programs.

RESULTS

We identified 22 studies, all of which were published between 2000 and 2011. Table 1 characterizes the associations between masculinity measures and health outcomes by study. Across the 22 studies, we identified 37 associations, of which 17 were positive, 7 were negative, 8 showed no association, and

5 included conditional associations. A positive association indicated that higher scores on the masculinity measures were associated with higher rates of the health outcome. A negative association indicated that higher scores on the masculinity measures were associated with lower rates of the health outcome. No association indicated that scores on the masculinity measures were unrelated to the health outcome. A conditional association indicated that higher scores on the masculinity measures were associated with higher rates of the health outcome, but only under certain conditions. Because some of the studies examined more than 1 association between masculinity and physical health, health behaviors, or mental health, the number of studies noted added up to more than 22.

Table 2 describes key characteristics of the studies. Of the 22 studies, 13 included samples composed entirely of men of color. Men of color were defined as men who self-identified as African American or Black, Asian, Hispanic, or Latino. No studies were comprised exclusively of Native American men, and only 2 studies even mentioned these men; in each case, the sample of Native American men was less than 1%. Seven studies included samples of only African American men, 2 studies included samples of only Asian American men, and 4 studies included only Latino men. Nine of the studies included men who self-identified as gay, bisexual, or men who have sex with men. Four studies included samples with 100% college males. The mean ages of the participants in the studies were between 20.4 and 38.4 years; thus, there were no published studies with a mean age of men of color of 40 years or older.

Across the 22 studies, 9 studies included a measure of male norms (e.g., Salience of Traditional Masculine Norms scale,⁴⁴ Male Gender Norms scale, Subjective Norms scale, and the Conformity to Masculine Norms Inventory²⁴), 7 included a measure of male gender role conflict or stress, 4 included a measure of machismo, and 3 included a measure of masculine ideologies or conceptions. The Male Role Norms Inventory (MRNI)²² and its subscales were used in all 3 of the studies examining aspects of physical health (e.g., health orientation, routine checkup and screening, and scheduling and obtaining

health examination),^{45–47} in all studies examining health care screening,^{44,45} and in 1 study of alexithymia.⁴⁸ The Conformity to Masculine Norms Inventory (CMNI) was used in 4 studies pertaining to mental health outcomes^{49–52} and in 1 study on substance use.⁵³ The second most common aspect of masculinity included factors associated with roles (e.g., Gender Role Conflict Scale [GRCS], Male Gender Role Stress Scale⁵⁴). Three studies included a measure of masculine conceptions or ideologies—the Conceptions of Masculinity Scale⁵⁵ and the Meaning of Masculinity Scale⁵⁵—and 3 studies included a measure of machismo. Neither male norms nor factors associated with roles yielded consistently positive, negative, or conditional associations with the health outcomes of men of color.

Physical Health

Three studies focused on the relationship between masculinity and some aspect of physical health. The Male Subjective Norms⁴⁵ and the MRNI subscales²² were used to assess masculinity and health orientation, health value, and holistic lifestyle. Across the 3 studies, responses to a measure of health orientation, or health-related psychological tendencies,^{46,47} were positively correlated with different aspects of the MRNI.²² Health value, or general concern with health issues,⁴⁵ was positively correlated with responses to both male subjective norms and restrictive emotionality.²² Responses to the Holistic Lifestyle Questionnaire that assessed different dimensions of wellness were associated with ideologies of traditional masculinity.^{46,47} A measure of personal wellness was associated with nontraditional masculinity, whereas the overall Holistic Lifestyle Questionnaire was positively associated with restrictive emotionality, self-reliance, and notions of traditional masculinity.^{46,47} A negative association was found between the MRNI and a measure of personal wellness.⁴⁶

Health Behaviors

Ten studies examined the relationship between masculinity and a specific health behavior.^{27,44,45,49,56–61} The MRNI subscales,^{22,44,45} Male Honor/Machismo scale,^{56,58} Conceptions of Masculinity scale,⁶⁰ Male Gender Role Stress Scale,⁵⁷ Perceived Masculine Norms scale,⁴⁴ Salience of

TABLE 1—Associations Between Masculinity and Health in Published Studies With Men of Color

Study Type	Positive Association ^a	Negative Association ^b	Conditional Association ^c	No Association ^d	Total
Physical health studies					
Health orientation, health value, holistic lifestyle, personal wellness	References 45–47			Reference 46	4
Total physical health	3	0	0	1	4
Health behavior studies					
Alcohol/substance use	References 27, 49	Reference 49			3
Delay in screening, checkup, use of health care resources			References 44, 45	Reference 44	3
Dietary intake, healthy eating				Reference 56	1
HIV prevention self-efficacy		Reference 57			1
Same-sex partners, sexual risk-taking, sexual health	Reference 60	Reference 61		References 57, 58	4
Steroid use	Reference 59				1
Total health behavior	4	3	2	4	13
Mental health studies					
Alexithymia	References 27, 48				2
Depression/depressive symptoms	References 51, 65	Reference 65	Reference 51		4
Eating disorders		Reference 63		Reference 63	2
Psychological distress/stress/symptoms	References 50, 53, 57, 65, 66		Reference 64 ^e	References 53, 67	9
Self-esteem		Reference 50, 57			2
Self-stigma	Reference 52				1
Total mental health	10	4	3	3	20
Overall total	17	7	5	8	37

Note. The minimum significance level for a significant association was .05. Because several of the studies included multiple outcomes, the number of associations summarized (37) exceeded the number of articles examined (22).

^aWhen higher scores on masculinity measures were associated with higher rates of illness/health behavior.

^bWhen higher scores on masculinity measures were associated with lower rates of illness/health behavior.

^cWhen a positive association existed, but only under some conditions.

^dWhen higher scores on masculinity measures were unrelated to health status/health behavior.

^eThis article reported findings from 2 studies with different populations (1 African American and 1 Latino and Asian American).

Traditional Masculine Norms scale,³⁶ Masculinity Ideologies scale,⁶⁰ GRCS,⁶¹ and CMNI^{24,49} were utilized to assess masculinity in the studies of health behaviors. The health behaviors in these studies included alcohol use, delays in screening, scheduling a routine checkup, dietary intake, steroid use, number of same-sex partners and sexual risk-taking.^{44,45,55–57} The relationship between masculinity and medical help-seeking (screening or a routine checkup) varied by the type of screening.^{44,45} There was a conditional association between notions of self-reliance²² and blood pressure and cholesterol screenings,⁴⁵ and there was no association between notions of self-reliance and receipt of a routine checkup.⁴⁵ There was a conditional association between perceived subjective norms and scheduling and obtaining a routine health examination or checkup,^{44,45} whereas receiving a routine checkup had no association with

perceived salience of traditional masculine norms.⁴⁴

Positive associations were identified between masculinity and steroid use, alcohol/substance use, and sexual risk-taking. Steroid use was positively associated with conceptions of masculinity and idealized notions of male social behavior and physical appearance.⁵⁹ Among Asian American males, several CMNI subscales were positively associated with substance use (e.g., binge drinking and current marijuana use).⁴⁹ The GRCS and 3 related subscales were positively associated with sexual risk-taking (e.g., interest in casual sex).⁶⁰

There also were negative associations between masculinity and risk-taking behaviors. HIV prevention self-efficacy—the perceived capacity to engage in HIV prevention behaviors—was negatively associated with gender role stress among African American

gay and bisexual men.⁵⁷ Among Asian American males, alcohol consumption was negatively associated with notions of risk-taking and emotional control.⁴⁹ Masculinity ideologies (conceptualized as emotional intimacy and power) were negatively associated with sexual risk-taking (e.g., number of male sexual partners) in a study of Mexican gay men.⁶¹

Sexual risk-taking and same-sex partners were not associated with gender role stress.⁵⁷ Dietary intake was not associated with machismo,⁵⁶ and neither traditional machismo nor *caballerismo* (i.e., exhibiting responsibility and respect for family and community) was associated with participation in risky sexual situations or number of sexual partners.⁵⁸

Mental Health

Of the total 22 studies reviewed, 12 examined a relationship between masculinity and

TABLE 2—Key Characteristics of Published Studies of Masculinity and Health Among Adult Men of Color

Characteristic	No. of Studies (n = 22)
Cross-sectional study design	22
Race/ethnicity	
100% African American men	7
100% Asian men	2
100% Latino men	4
100% Native American men	0
> 1 racial/ethnic group of men	8
Race/ethnicity and sexual orientation	
Explicit mention of men who have sex with men	9
100% African American men who have sex with men	0
100% Asian men who have sex with men	0
100% Latino men who have sex with men	2
100% Native American men who have sex with men	0
Mean age > 40 y	0
Setting: 100% college sample	4
Aspect of masculinity measured	
Machismo	4
Male norms ^a	9
Masculine conceptions/ideologies	3
Male gender role conflict/stress	7

^aMale norms included measures of conformity to masculine norms, role norms, subjective norms, and salience of traditional norms.

some aspect of mental health. Mental health was the most common outcome in the studies we identified, and psychological distress, psychological symptoms, and psychological stress were the most frequently used mental health outcomes. In studies that examined the relationship between masculinity and mental health, the following scales were used: machismo,^{27,62} MRNI,⁴⁸ the meaning of masculinity,⁶³ perceived CMNI,^{50–52} Masculine Gender Role Stress,^{54,57} and aspects of perceived GRCS.^{26,53,64–67}

Machismo and beliefs about traditional masculinity were positively associated with alexithymia,^{27,48} or the inability to identify or describe emotions, whereas *caballerismo* was negatively associated with alexithymia.²⁷ Depression was positively associated with several measures of masculinity that examined gender role conflict,⁶⁵ restrictive emotionality,^{26,65} machismo,^{62,65} and CMNI of emotional control.^{24,51} For eating disorders, masculinity was negatively correlated or had no association with subscales of the Meaning of Masculinity

Scale.⁶³ Eating disorders were the only mental health outcome for which there was no positive association. Five studies assessing psychological distress, psychological symptoms, and stress were positively associated with 4 measures of masculinity: machismo,⁶² CMNI,²⁴ Gender Role Conflict scale and 4 subscales (restrictive emotionality; restrictive affectionate behavior between men; drive for success, power, and competition; conflict between work and family),²⁶ and role stress.⁵⁴ Self-esteem was negatively associated with role stress.⁵⁷ CMNI was negatively associated with self-esteem⁵⁰ but positively associated with self-stigma.⁵²

DISCUSSION

This article documents the associations between masculinity and health outcomes for men of color. The associations between masculinity and health are complex and vary by construct and health outcome. Although we are cautious not to overstate any patterns that

emerge from only 22 studies, we identified key gaps and research questions that are beneficial to our collective ability to understand social determinants of health in general and men's health in particular. We recognize that by focusing only on published quantitative articles we may be understating the current evidence. However, because we did not place any limits on the date of publication in our search for potential articles, the small number of articles seems to reflect a potentially new interest in studying masculinity and the health of men of color.

There were surprisingly few studies that examined the relationship between masculinity and men's physical health outcomes, and 4 of the 10 studies of masculinity and health behavior yielded null findings (no association). Because the health behavior studies were arguably the most diverse category that we assessed, it is critical for future research to articulate and test more specific hypotheses that examine why masculinity might be related to specific behaviors in general and what conceptions and aspects of masculinity are most relevant to and associated with particular behaviors. For example, we might hypothesize that gender role conflict or gender role stress is more strongly associated with unhealthy eating than seat belt use; the former is hypothesized to function along a stress pathway, whereas the latter is not. Similarly, we might hypothesize that machismo is more strongly associated with sexual risk behavior than healthy eating; both are gendered behaviors, but sexual behavior tends to be more consistent with negative aspects of machismo than whether men choose to eat fresh fruits and vegetables.

Studies that addressed mental health were the most common outcome in the published research on masculinity and men of color. Although these relationships between masculinity and mental health generally were significant in the hypothesized directions, future research should examine how different conceptions of masculinity are associated with different mental health outcomes. Beyond simply identifying that relationships between outcomes exist, future research should clarify why these relationships exist and if they are consistent across racial and ethnic groups. Researchers have recommended exploring the

relationship between gender role conflict and psychological symptoms in racially diverse samples of men,^{64,68} but few studies have included such diversity, with a few notable exceptions.^{64–66} We know very little about between- and within-group variation in terms of how men of color understand and express their masculinity; therefore, this should be taken into consideration in future work in this area.⁶⁴ Exploring these types of research questions may be best answered using qualitative or mixed-method approaches than exclusively quantitative methods.

Recent research has highlighted the importance of examining how social and cultural expectations of men and women shape their behavioral strategies for coping with stress; these patterns may help explain not only racial disparities in health outcomes but how these patterns vary by sex as well.^{69,70} What is not clear, however, is how men's conceptions of various aspects of masculinity may shape men's physiological or behavioral response to stress.^{69,71–73} Qualitative research has highlighted the importance of recognizing that men of color not only face gendered stressors, but ones that are shaped by race and ethnicity as well.^{28,36,74} Simply focusing on the response of men of color to their embodiment of perceived gender norms, expectations, stressors, or conceptions of masculinity may miss the fact that a key aspect of their social experience and identity has to do with their racial and ethnic identity, sexual orientation, or some other aspect of their identity (e.g., disability status). These masculinities are frequently discussed in the qualitative literature, but existing measures of masculinity only capture singular notions of masculinity. Conversely, this also highlights the importance of considering the role of gendered stressors in examining the health implications of racial discrimination, microaggressions, or racism.

Some researchers are beginning to explore the centrality of masculinity versus racial identity (and Asian values) in men's identities and health.^{49,50,53,64} In addition, one of the key areas that is emerging in both the quantitative and qualitative men's health literatures is how sexual orientation, sexual identity, and traditional conceptualizations of masculinity intersect to affect the health behaviors and health outcomes of men of color.^{39,52,55,57,59}

These issues not only seem to vary in relation to specific behaviors but in relation to sexual identity. Thus, it is critical for future research to examine what *intersectionality* means in men's health, how men practice 1 or more conceptualizations of masculinity, and how men synthesize and experience socially, culturally, and politically defined identities in ways that mediate and moderate the intersection of structural factors and psychological experience.^{15,19,20,75}

Although we did not include these studies in our review of measures of masculinity, research on John Henryism—the psychological and behavioral pattern of active coping with chronic life stressors—is relevant to consider here. John Henryism has been used to help explain African Americans' high rates of heart disease and premature mortality through both men's physiological and behavioral response to stress.^{76–80} Although the term suggests this pattern of coping is unique to men, research on John Henryism has consistently shown that women may also engage in similar patterns of coping with chronic stressors. Research has shown that women describe gender role strain, gender role stress, and various other psychological factors that are similar to conceptions of masculinity.^{81–86} Future studies should examine what is common to men's and women's social experience of gendered stressors and expectations and what is unique to members of each sex. For both sexes, there appears to be a limited range of ways that men and women can embody and perform gender, and these experiences are racialized in men's and women's lives.

The final area that would seem to warrant attention in future research on masculinity is how men who are middle-aged and older adults conceptualize, perform, and embody masculinity. There were no published studies of masculinity and health among men of color that had an average age of 40 years or older. Few existing measures of masculinity may include constructs that are salient for the masculinities men perform in middle and older adulthood. Because the fundamental meaning of masculinity and the salience of different aspects of masculinity change over the life course, it is critical to consider the relevance of current measures of masculinity for older men of color. Some of the masculinities men try

to perform when they are younger tend to demonstrate their physical strength, sexual prowess, and risk tolerance, but as men age they tend to also want to demonstrate more positive aspects of masculinity: being a responsible father, provider, husband, etc.^{36,71} Furthermore, men of color tend to develop myriad chronic conditions, though they are less likely than are women to seek physical or mental health services or adopt healthy lifestyles; it is critical to identify positive aspects of masculinity that can be the foundation for interventions to promote healthy behaviors, lifestyles, and outcomes.^{46,87–90}

Although it is critical to gather and explore the relationship between masculinity and health among men of color, several limitations of this study should be considered. Our goal was not to conduct a systematic review of the literature in this area, nor was it to present the details of the studies included in our review. Thus, our approach to characterizing the relationships between masculinity and health at the level of the study may have limited our ability to describe and discuss nuances between subscales of the measures of masculinity and specific health outcomes. We also did not report analyses by race, ethnicity, or sexual identity, though we recognize that the measures of masculinity represent constructs that may vary in terms of their salience for specific groups. Finally, by not reviewing qualitative studies, we acknowledge that we are missing the ability to hear from these men what these measures of masculinity, and the constructs they operationalized, represent for them. Future research should address these concerns and issues. In particular, research on masculinity and health among men of color should more explicitly articulate the rationale underlying the hypothesized relationships between these constructs and outcomes. It also will be critical to develop and test measures of masculinity that cut across socially defined groups as well as try to capture the unique experience of men of color that vary by race, ethnicity, sexual identity, age, and other socially meaningful categories.

Masculinity, whether operationalized as a singular or plural term, plays a critical role in the health of men of color. Masculinities organize and pattern daily life, social practices, and social relations;² the health needs of men

of color need to be explored in the contexts of their specific life circumstances, particularly because the causes of most men's health problems are social and behavioral, not biological.⁹¹ The health disparities literature typically does not include a discussion of the intersection of masculinity with race, class, and ethnicity, leaving a large gap in our collective ability to understand how masculinity influences sex differences in health, men's health disparities, and the health of men of color. It is critical for future research to systematically assess masculinity in a way that does not separate men's health outcomes from the men who experience them or from the contexts in which their health occurs, is identified, and is treated.^{4,29} ■

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