Racial/Ethnic Variations in Women's Health: The Social Embeddedness of Health

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This article proposes an examination of the magnitude of racial/ethnic and social disparities in health for women in the United States. It highlights the importance of understanding disparities in health by race and gender and by gender and race, and emphasizes the importance of collecting data on these disparities. The article also discusses the importance of understanding the social determinants of health disparities in women and presents an analysis of the social embeddedness of health disparities in women, drawing on the work of Public Health in 2002/2: 565-581.

Race/ethnicity, gender, and socio-economic position are all social spatial categories that lead to the differential distribution of health risks and that lead to variations in the incidence and mortality of disease. This article is an overview of social/ethnic disparities in health disparities and complex interactions between race/ethnicity and SES in affecting women's health. Finally, it highlights the ways in which social structures and processes affect the distribution of disease among American women.

RACIAL/ETHNIC DIFFERENCES IN HEALTH

In the United States, the number of industrialized women is at risk for developing morbidity and mortality rates of women than men in 1989, 1998, and 2006. Women had a life expectancy at birth of 79.3 years, which was 5.7 years longer than that of men (73.8 years) across the period from 1989 to 2006. However, data on mortality rates by race and ethnicity were not available for Asian and Pacific Islanders. The gender difference in 72 years of women within the African-American population (74.8 vs. 67.6 years) was greater than the 9-year gender difference for Whites (78.6 vs. 72.3 years). Thus, although women of both racial groups outlive their male counterparts, White women have a life expectancy at birth that exceeds that of their Black peers by 9.3 years.

An examination of age-adjusted mortality rates for all causes for women and men that despite declining death rates over time, African Americans have consistently had higher mortality rates than Whites. The Black-White mortality rate for females declined from 2.07 in 1950 to 1.57 in 1984. These data also highlight the problem of data availability for racial/ethnic groups other than Black and White. Nationally reported data for American Indians and Alaskan Native Americans are available only for 1982, and data for Hispanics only from 1993. Coverage of Hispanics has increased from only 17 states and the District of Columbia in 1993 to all 50 states and the District of Columbia in 1997.

American Indian/Alaskan Native mortality rates are nearly uniform across all states. However, racial mortality rates from selected causes, such as diabetes, heart disease, and stroke, vary by racial group. Data for 1989 to 1991 revealed that deaths from chronic diseases are more common among African Americans. The social embeddedness of health disparities in women is illustrated by the fact that women have a lower life expectancy than men, but the mortality rates for women are as high as those for men. The quality of mortality data is much better for blacks and Whites than for other racial/ethnic groups owing to a substantial undercount in the population that understimates officially reported mortality rates for American Indians, Alaskan Natives, and Hispanics. For example, Sabe and colleagues' reported the self-reported race from a personal interview with the rate of incidence recorded on the death certificate. Race on the death certificate is typically based on observation or proxy reports. High agreement from both sources was noted for Blacks and Whites but only 4,4% of American Indians and 3% in Asian/Pacific Islanders were classified as belonging to another race (mainly White) on the death certificate. The percentage of self-identified Hispanics were misclassified as non-Hispanic.

Racial and ethnic disparities in the occurrence, course, and outcome of cancer also contribute to observed disparities in social/economic position and mortality. Black-White differences in survival rates from cancer illustrate this. Between 1975 and 1979, 75% of White female melanoma patients with 43% of their Black female counterparts had 5-year survival rates for cancers at all sites. Data for 1989 to 1991 revealed that the 5-year survival rate for women was 63%, and slightly higher for White females, to 49%. Thus, the social embeddedness of cancer survival varies between 10-30 percentage points in the current period for which data are available to 11 percentage points in the most recent one.

There is some variation by specific types of cancer. Racial differences for breast cancer are considerable for larger breast cancers and cancer in older women. The trend for larger breast cancer is increasing breast cancer, especially with Black women. White women have a higher mortality rate than Black women, but a lower mortality rate.
There are racial differences in cancer staging. Black women are likely to be diagnosed with advanced cancer at the time of diagnosis than their White peers. However, poorer stage-specific survival rates are also evident for Black compared with White women. Not surprisingly, between 1980 and 1995, the relative survival rate for breast cancer was 77% for African American women and 88% for White women.

Compared to other diseases disproportionately affect minority women, and the incidence of multiple cancers are worse for at least some minority populations than for Whites. Among persons with diabetes, both male and female African Americans are more likely than their White counterparts to become amputee, to develop end-stage kidney disease and to die of diabetes. Similarly, hypertension is more strongly associated with the development of renal disease for African American Indians and African Americans than for Whites. Other recent data documented in a recent US medical report that the rates of cardiovascular disease are rising for African American and minority women are even more notable for this population.

DIVERSITY OF HEALTH PROFILES

The 10 leading causes of death in 1998 for women in each of the major racial/ethnic populations described here is a major health challenge faced by these groups. These data also highlight some of the major challenges facing US women. Cancer and heart disease and cancer as the leading causes of death for all women in the United States except Asian/Pacific Islander women, for whom the order is reversed. Cardiovascular disease and cancer are tied as the leading causes of death for all women in the United States. Cancer of the breast and cancer of the cervix are the 2 leading causes of death for all women in the United States except those of Hispanic origin. Breast and cervical cancer are the 2 leading causes of death for all women in the United States except those of Hispanic origin.

Hypertension, in a woman, is a major risk factor for both coronary heart disease and cardiovascular disease. Rates of hypertension are 1.9 times higher for African American American than for White women. Mexican American, Puerto Rican, Native Hawaiian, and American Indian women have higher rates of hypertension. Eighty percent of hypertension is more likely to be diagnosed with advanced cancer at the time of diagnosis than their White peers. However, poorer stage-specific survival rates are also evident for Black compared with White women. Not surprisingly, between 1980 and 1995, the relative survival rate for breast cancer was 77% for African American women and 88% for White women. Other recent data documented in a recent US medical report that the rates of cardiovascular disease are rising for African American and minority women are even more notable for this population.

DIVERSITY OF POPULATIONS

Each racial/ethnic population is characterized by considerable diversity. Data on cancer incidence provides a unique glimpse of the heterogeneity within the Asian/Pacific Islander category. For example, Vietnamese

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**Table 1: Age-Adjusted Mortality Rate (per 100,000) for Non-Hispanic Whites and Minority-Wide Rates for Selected Causes of Death Women in the United States, 1996-1998**

<table>
<thead>
<tr>
<th>Cause</th>
<th>Black Women</th>
<th>White Women</th>
<th>Asian/Pacific Islander Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular diseases</td>
<td>50.3</td>
<td>50.5</td>
<td>50.2</td>
</tr>
<tr>
<td>Hypertension</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Diabetes</td>
<td>3.1</td>
<td>3.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Stroke</td>
<td>5.0</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Cancer</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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women have a rate of cervical cancer that is considerably higher than that of both Black and White women and about 3 times that of Japanese and Chinese women. Similarly, breast cancer mortality for Native Hawaiian women is higher than that of African American women and more than twice that of Korean and Vietnamese women.

There has been limited attention to diversity within the Black population, but some research suggests there may be important health status variations within this group as well. For example, Feucher and colleagues found that among Black women, American born and Haitian-born women had higher rates of cervical cancer than women born in the Western Hemisphere, while both migration groups had lower rates of breast cancer than American-born Black women. Variations within the Black population of the United States have also been reported for both outcomes and mental health.

Similarly, an overall health statistic for Hispanic women takes the heterogeneity that exists among Latinos. For example, rates of death among Black women are higher than those of other Latina/Os. Considerably heterogeneity exists within the population of African American women, for example, in 1989, 78% of Hispanic women received prenatal care during the first trimester of pregnancy, compared to 85% of non-Hispanic Whites and 73% of Blacks. However, first-trimester prenatal care rates are 94% for Caucasians and 73% for Mexican American women. Smoking during pregnancy in another example. Only 4% of Hispanic mothers avoided smoking during pregnancy in 1989, compared to 16% of non-Hispanic Whites, 16% of African Americans and 8% of Mexican Americans. A 1989, 3.6% of Black mothers smoked.

UNDERSTANDING RACIAL/ETHNIC DISPARITIES IN HEALTH

Early research on racial differences in health in the United States viewed racial categories as capturing biological homogeneity and racial differences in health as genetically determined. There is growing recognition that it is scientifically untenable to view race as capturing biological differences within human populations. 2, 10 Our racial categories are more alike than different in terms of biological characteristics and genetics. and they do not capture patterns of genetic variation. Thus, a racial category is not biologically pluse for genetic differences that play a major role in racial/ethnic differences in health. Biological factors including genetic variation may, nonetheless, play a small role in accounting for population differences in health. Biology is not static but adapts over time to the conditions of the environment. Thus, for racial/ethnic groups living under different environmental conditions, interaction between biology and socially determined exposures can lead to adaptations that may contribute to population differences in health.

SOCIOECONOMIC STATUS AS A DETERMINANT OF HEALTH DISPARITIES

A growing body of research in genetics on the social context of minority women as related to their socioeconomic position. SES is a term commonly used to refer to an individual’s or group’s location in the structure of society that determines differential access to power, privilege, and desirable resources. SES typically is measured by income, education, or occupational status. The major racial/ethnic categories in the United States capture different social economic circumstances, and SES plays a major role in accounting for disparities in health.

Table 2 presents age-adjusted rates of hypertension and obesity for White Black and Mexican American women in the United States, stratified by income. There are marked differences in these 2 indicators of health status. White women have lower levels of both hypertension and overweight than their Black and Mexican American counterparts. Rates of hypertension are about 5 times as high for Black women than for White women, and both African American and Mexican American women are more than 2 times as likely to be overweight as White women.

Several patterns are evident in these data. First, income is strongly linked to hypertension for Black and White women and to overweight for White and Mexican American women. Women with lower levels of income have some benefits that their economically favored counterparts. However, income was unrelated to hypertension for Mexican American women and was not strongly associated with overweight for African American women.

Second, despite the truncation of the high end of income differences in hypertension rates by income within the Black and White populations are almost as large as the overall Black-White differences. It is frequently observed for multiple indicators of health status that differences between socioeconomic categories within each are larger than differences between rates. 21-23 Indeed, racial differences persist at every level of SES, emphasizing that race is more than SES. These patterns of finding may reflect complex interactions between race/ethnic status and migration history or cultural barriers to access to medical care, independent contributions of autonomous and individual discrimination, or the

| TABLE 2: Age-Adjusted Rates for Hypertension and Overweight, by Race/Ethnicity and Average Annual Income: Women in the United States Age 20+ Years, 1998-2004 |

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Income Level</th>
<th>White</th>
<th>Black</th>
<th>Mexican American</th>
<th>White</th>
<th>Black</th>
<th>Mexican American</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>Low</td>
<td>15.5</td>
<td>34.2</td>
<td>22.0</td>
<td>37.3</td>
<td>53.5</td>
<td>51.0</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>15.5</td>
<td>34.2</td>
<td>22.0</td>
<td>37.3</td>
<td>53.5</td>
<td>51.0</td>
</tr>
<tr>
<td>Overweight</td>
<td>Low</td>
<td>32.2</td>
<td>44.2</td>
<td>21.0</td>
<td>45.2</td>
<td>56.2</td>
<td>54.0</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>32.2</td>
<td>44.2</td>
<td>21.0</td>
<td>45.2</td>
<td>56.2</td>
<td>54.0</td>
</tr>
</tbody>
</table>

Source: National Center for Health Statistics.
monopoly of SES indicators across racial/ethnic populations.12,13

Thus, although SES is almost universally a central determinant of health among African American women. It is unknown whether the pattern reflects a healthy-immigrant effect, protective effects of the immigrant culture, or differences in the temporal period between Mexico and the United States in the secular distributions of hypertension and other risk factors for heart disease. The Mexican American population has a large number of immigrants who are low in SES but not a relatively good health. At the same time, several health behaviors that adversely affect health status and the prevalence of multiple health conditions in women with re- natal care and length of stay.8

The absence of an association between overweight and smoking for Black women highlights the need to better understand the role of culture and interactions between cultural traditions and social conditions. Some evidence suggests that blacks have more favorable attitudes toward obesity.14 It is possible that such a cultural preference could lead to culturally normative elevated rates of overweight among all Black women and thus dampen the expected tendency for income to predict weight as a whole.

Alternatively, the absence of a pattern of overweight by income could reflect the impact of the social and economic characteristics of the communities in which African American women reside. In perceptions of household income, Black women are more likely than women of other groups to reside in highly segregated neighborhoods with a greater concentration of poor persons.15,16 These communities tend to have limited exercise facilities and reduced opportunities to engage in physical exercise under conditions of mental safety. Moreover, in addition to having high rates of poverty, Black women are also more likely than women of other groups to be single parents. The combination of these factors can lead to higher levels of stress and create constraints on time, financial resources, and access to exercise facilities that can lead to lower levels of leisure-time physical activity.13

Table 3 further illustrates the complexity of the associations between race, SES, and health. The percentage of women who smoke cigarettes is only slightly higher for Whites than for Blacks. However, in both groups, the rate of cigarette smoking is strongly patterned by income. Poor White women are 1.7 times as likely as their middle and high-income peers to smoke, and poor African American women are almost twice as likely as their higher-income counterparts to smoke. Within each racial group, the differences by economic status are large, much larger than the overall difference between races.

At each economic level, African American women report markedly lower levels of smoking than similarly situated Whites. The difference between racial groups suggests the presence of health-enhancing factors within the African American population that reduce the normally expected levels of smoking. The roughly comparable proportions of users among Black and White women overall reflect the fact that, compared with their White counterparts, Black women are overrepresented among the poor and underrepresented among middle- and high-income persons.

Infant mortality rates are strongly patterned by educational level for both Black and White women, with increasing years of education predicting lower levels of infant mortality. Among Whites, women who did not complete high school have an infant mortality rate that is 2.4 times the rate of women who graduated from college. Similarly, among African American women, women with less than 12 years of education have an infant mortality rate that is 1.5 times as high as that of college graduates.

However, the racial differences at every level of education are striking. Infants born to White women in the lowest education category are 1.7 times as likely to die before their first birthday as are infants born to similarly educated Black women. At every other level of education, the White-White ratio is greater than 2. In fact, White women who did not complete high school have a lower infant mortality rate than Black college graduates, and the Black-White ratio for infant mortality increases with level of education. Black college graduates have an infant mortality rate that is 2.7 times the rate of their White counterparts.

TABLE 3—Black-White Differences in Cigarette Smoking and Infant Mortality, by Socioeconomic Status Indicators: Women in the United States, 1995

<table>
<thead>
<tr>
<th>SES Indicator</th>
<th>Black</th>
<th>White</th>
<th>Black-White Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>23.8</td>
<td>21.9</td>
<td>1.09</td>
</tr>
<tr>
<td>Mid</td>
<td>26.6</td>
<td>23.1</td>
<td>1.16</td>
</tr>
<tr>
<td>High</td>
<td>14.0</td>
<td>14.0</td>
<td>1.00</td>
</tr>
<tr>
<td>Age at Birth</td>
<td>15.7</td>
<td>15.7</td>
<td>1.00</td>
</tr>
<tr>
<td>Infant Mortality Rate, by Education Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;12 yrs</td>
<td>17.3</td>
<td>17.3</td>
<td>1.00</td>
</tr>
<tr>
<td>12-15 yrs</td>
<td>14.8</td>
<td>14.8</td>
<td>1.00</td>
</tr>
<tr>
<td>16+ yrs</td>
<td>15.3</td>
<td>15.3</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Notes: All data are from the National Health Interview Survey. Race by income is not a significant predictor of infant mortality. Racial-ethnic differences exist in the age at which women give birth, and the age at which women give birth is a significant predictor of infant mortality.
and group differences in the very nature of SES that make all of the standard SES indicators noncomparable across race. In this article, I provide details on racial/ethnic differences in wealth and income for four levels of education, but similar disparities also exist for the quality of education, the postcollege power of income, the stability of employment, and the health outcomes associated with working in particular occupations.

Racial/ethnic differences in wealth are considerably larger than those in income, and focusing only on income understates the mental/health disparities in economic status. For example, in 1995, the median wealth that White households, $149,000, was almost 2.5 times that of Black ($57,000) and Hispanic ($45,000) households. These differences persist at every level of income. White households in the lower quartile of income had a net worth of $27,000, compared with $15,000 for Blacks and $12,000 for Hispanics. At the highest quartile of income the net worth was $212,000 for White, $49,000 for Black, and $49,000 for Hispanic households. There are also large racial differences in homeownership, a key source of wealth for the average American family. A little more than half of Black and Hispanic households own their homes, compared with more than 70% of White households.

Among men, the income hormones for a given level of education are large, with Black and Hispanic males at every level of education earning considerably less than similarly educated White counterparts. In contrast, there are only small differences among women in personal earnings at various levels of education (Table 4). These data yield racial differences in pay.

Analysis of weekly earnings of Black and White women between 1967 and 1997 reveals that the Black–White gap in pay narrows at the 1960s and early 1970s but has widened since the early 1980s. Women of all ages have higher rates of unemployment in technical, sales, and administrative-support occupations. However, while a high percentage of White and Asian women are employed in managerial and professional occupations, a high percentage of Black, Hispanic, and American Indian women are employed in service occupations. Black families have historically relied more heavily on women’s earnings than the other families, and the proportion of female-headed households is highest among Blacks. There are racial differences in marital status and thus in the number of adult contributors to the household income, meaning that focusing only on personal income underestimates racial differences in the flow of economic resources within the household. Table 5 shows median household income by years of education for White, Black, and Hispanic women. The racial/ethnic differences in income are even more marked at every level of education. Black and Hispanic women earn considerably less than Whites of similar education. Blacks earn less than Hispanics, and the differences between Black and White are especially large. For example, Black high school graduates earn $431 more, and college graduates $121 more for every dollar in total household income earned by similarly educated White women.

These data highlight the critical need to comprehensively assess SES in its multiple dimensions and to consider consequences across the life course. Recent research on economic hardship highlights the fact that there are important racial differences in economic circumstances that are not captured by the traditional measures of SES. Data from the Survey of Income and Program Participation indicate that even after controlling for SES factors, education, marital status, homeownership, and employment status and demographic factors such as age, sex, marital status, race, disability, education, and age, Asian Americans were more likely than Whites to experience difficulties with a wide variety of economic hardships examined. That is, they were more likely to report being unable to meet essential expenses, being unable to pay rent or mortgage, being unable to pay for medical care, or being unable to pay for utilities. These data suggest that if we are to better understand the causes of health disparities, we must also consider the role of economic hardship.

### Trends in Economic and Health Disparities

Analysis of trends in Black–White wage gaps by race, economic status, and health over the last decade provides some additional insights into the nature of these disparities. While the gap in median income between Black and White households has narrowed, the gap in mean income has widened, particularly for those with less education. These trends are consistent with the findings of other studies, which have shown that the gap in median income between Black and White households has narrowed, while the gap in mean income has widened, particularly for those with less education. These trends are consistent with the findings of other studies, which have shown that the gap in median income between Black and White households has narrowed, while the gap in mean income has widened, particularly for those with less education.

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**TABLE 4: Personal and Household Income (5) of Non-Hispanic White, Black, and Hispanic Women: United States, 1996**

<table>
<thead>
<tr>
<th>Education</th>
<th>Non-Hispanic White</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 9th</td>
<td>40,000</td>
<td>50,000</td>
<td>15,000</td>
<td>10,000</td>
</tr>
<tr>
<td>9th-11th</td>
<td>100,000</td>
<td>110,000</td>
<td>60,000</td>
<td>40,000</td>
</tr>
<tr>
<td>12th-13th</td>
<td>150,000</td>
<td>160,000</td>
<td>90,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Some college</td>
<td>180,000</td>
<td>190,000</td>
<td>100,000</td>
<td>70,000</td>
</tr>
<tr>
<td>Associate’s degree</td>
<td>210,000</td>
<td>220,000</td>
<td>120,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>240,000</td>
<td>250,000</td>
<td>150,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Professional degree</td>
<td>450,000</td>
<td>470,000</td>
<td>300,000</td>
<td>220,000</td>
</tr>
</tbody>
</table>

50 years, noted that racial disparities in health were more severe in rural areas compared to urban areas.

During the 1960s and early 70s, the civil rights movement led to significant progress in the political and economic situation of blacks and a decrease in the Black-White gap in income. Between 1965 and 1978, African American men who were age 15 to 24 years had a larger decline in overall poverty than Whites in the same age group, on both a percentage and an absolute basis. 24 This pattern was noted across multiple causes of death. For example, the mortality rate for Black men declined by 5.16 deaths per 100,000 population, compared with a decline of 106 deaths for White men. This was a 25% decrease in mortality for Black men and a 17% decrease for White men.

However, the narrowing of the Black-White excess gap stalled in the mid-1970s, and remained at the early 1970s. The health of poor women and their children worsened in 20 states in the wake of the budget cuts in health and social service spending by the Reagan administration in the early 1980s. Similarly, some hospitals lost Medicare contracts and levels of blood pressure improved among persons terminated from Medicaid in the state of California. 25

Not surprisingly, the health of women, African American men and women declined relative to that of Whites between 1980 and 1985. For example, the Black-White ratio for the first mortality for females increased from 2.9 in 1968 to 2.9 in 1978, and the Black-White gap in life expectancy for males remained from 3.6 years in 1970 to 3.8 years in 1985.

Many of the health status of poor black and white populations during this same period when documented were ongoing health for Blacks at the local level, multiple locations. For example, between 1980 and 1985, the average death rate and annual excess death for African Americans compared with White men in Charlotte, North Carolina, the 20 largest cities, and the 100 largest cities. At the same time, both the annual excess death rate and the annual excess number of deaths declined significantly for White women in central Detroit. Yet, suggesting the need to understand the determinants of variation at the local level.

UNDERSTANDING RACIAL/ETHNIC DISPARITIES IN HEALTH

Understanding the differential distribution of health outcomes across ethnic groups, sex, and socioeconomic status requires the evaluation of health status through sociocultural, economic, political, and institutional barriers and poverty. National health disparities and structural barriers limit the mobility of many women in this regard, as well as the access to care for the less educated and the marginalized.

Medical Care

Efforts to improve the quality and accessibility of medical care have led to a decrease in the US mortality rate from 1990 and 1985. However, the Black-White gap has remained the same over this period and the gap between African Americans and Whites has widened. Moreover, this study found that even when socioeconomic factors were controlled, Black women were three times more likely to be uninsured.

The Indian Health Services, a federal agency that provides direct and contact health care services to American Indians who live on or near reservations. The agency has been successful in improving the access to American Indians and Whites. However, the Black-White gap persists, and other challenges limit the ability to meet the full health care needs of its target populations.

A large body of evidence documents pervasive racial and ethnic disparities in the diagnosis and treatment of minority persons. These disparities exist across a broad spectrum of diagnostic and therapeutic interventions, ranging from high-technology procedures to the most elementary forms of diagnosis and treatment outcomes. These disparities affect various public health initiatives, targeting the higher-income groups and the health care system.

Place and Health

Place is the neglected but critical issue affecting the health of populations. A recent analysis of poor Black and White populations...
in rural and southern Louisiana and in northern urban areas documented an important association among poverty, race, and place. Although African American men and women in rural and southern Louisiana faced economic conditions that were similar to or worse than those of black populations in northern urban areas, they reported substantially better health. A similar pattern was evident for whites. In fact, the health profile of poor whites in some northern urban areas is comparable to that of more economically disadvantaged blacks in the South. For example, the 1980 mortality rate of 429 per 100,000 population for white women in Detroit, Mich., was comparable to mortality rates for black women in Northern Carolina (428 per 100,000) and in the "black belt" of Alabama (429 per 100,000). Similarly, Puerto Rican residents of New York City have higher coronary heart disease mortality than Puerto Ricans living in Puerto Rico and Puerto Ricans born in the United States. At present, it is not clear whether the patterns of health by place reflect the interpersonal difference in urban areas or the concentration of social services and the health infrastructure in some urban contexts or the presence of resources, such as a low prevalence of diabetes, and higher social cohesion in rural areas.

**Migration and Acculturation**

There is also an effort to explain our understanding of the ways in which stressors and resources varied in the process of migration and acculturation relative to each other and combine to affect the health of immigrants. While immigrants of all racial/ethnic groups have lower infant and adult mortality than their U.S.-born counterparts, these patterns are complex and not well understood. A good health profile for immigrants may reflect the tendency for immigrants to be selected on the basis of good health or may reflect a return of at least some illness characteristics to their home countries, but these factors alone do not explain the health profile of immigrants.

Moreover, better health for immigrants does not exist for all outcomes. For example, a study of pregnancy-related mortality between 1969 and 1977 revealed that U.S.-born and foreign-born Black and Hispanic women and foreign-born Asian women had higher pregnancy-related deaths than White, white women in the United States. In addition, Hispanic and Asian immigrant women had higher pregnancy-related mortality rates than their U.S.-born counterparts. Levels of institutional mortality were especially high for Black women, the pregnancy-related mortality risk of both Black and foreign-born Black women was 4 times as that of white women.

Similarly, although Hispanic women have lower levels of infant mortality than White women, women of all Hispanic immigrant groups have a higher risk of low birthweight and prematurity than the White population. Analysis of a large cohort of longitudinal mortality data reveals that both Asian and Hispanic immigrant groups and persons born in the United States of Mexican origin, there is a consistent convergence same time with the health profile of the White population. Similarly, the advantage in coronary heart disease mortality for Puerto Ricans on the mainland appears to be declining over time.

Clearly, the associations between migration, acculturation, and health are complex, and they are not consistent among different populations. The manner in which changes in the United States 1970, with rates of other factors (e.g., life style and local culture) decline. There is much evidence that migration and culturally different are the harmful and protective factors related to immigrant and host cultures and in identifying the needs and communicative role of which the other factors combine over time, across generations, and in particular geographies to affect health.

**Stressors and Resources**

Most generally, we need more comprehensive characterization of the stressors and resources that may have consequences for health. This will require a greater emphasis on a life course approach that seeks to understand the ways in which resources and adaptively accumulate over the lifetime to affect adult health. It will also require greater attention to stressors that are linked to the status of women in society. This includes examining the physical and mental health consequences of exposure to physical, sexual, and emotional abuse in childhood and adolescence, as well as the role of social stressors and social experiences of discrimination, both within and outside the home, over the life span.

In practice, we do not clearly understand how the conditions, contexts, and demands of the multiple gender roles that women occupy in society lead to the accumulation of particular configurations of risk and resources that affect their health status. Analyzes of state-level data in the United States reveal that higher levels of political and economic status for women are associated with lower morbidity and mortality.

The lower rates of morbidity and mortality for this group of lower morbidity and mortality for low income populations are associated with the lower rates of the "negative effects of exposure to social and economic adversity.

Strong family life and the extended family system, and religious involvement and participation may reduce some of the negative effects of stress in the lives of minority women. For example, religious involvement and participation can provide supportive social relationships, tangible economic resources, comfort in times of trouble, a sense of security, and support for engaging in healthy behavior, and belief systems that provide meaning and understanding. However, researchers and practitioners should recognize that social relationships and religious involvement can provide both stress and support, and the negative as well as the positive aspects of these potential resources should be assessed.

**Racism**

Given research on community women must also give greater attention to the ways in which racism may affect their health. Institutional discrimination plays an important role in restricting economic opportunity for minority women and, indirectly, as a key determinant of adult socioeconomic status. Ritual residential segregation, a key institutional mechanism of racism, may play a critical role in shaping the health consequences linked to residential location.

In addition, a growing body of research suggests that the subjective experiences of dis...
Conclusion

Like many researchers in this field, this article has nowhere used White women as the group against which to compare the health experience of minority women in the United States. In race-conscious societies, early comparison yields useful data, but the limits should be explicitly acknowledged since the health status of White women is not an optimal benchmark. For example, the infant mortality rate for non-Hispanic Whites was 11 per 1000 live births in 1998. Nine of us had infant mortality rates for that year that were lower than that of US Whites. Similarly, in 1998, infant mortality in 86 countries had been below 10 per 1000. This was the rate for White women in the United States.

Data, despite leading the world in absolute and per capita spending on medical care, the United States does not provide readily available levels of health status and trends that can be analyzed for these data, the recent availability of information on the health status of women, and the ongoing attention to the conditions that affect their health.

Attention to identifying and addressing the social determinants of health should not obscure the importance of identifying the specific physiological mechanisms and pathways that link social status to health and disease. Research is needed to identify how biological factors linked to social factors combine to generate specific health outcomes. Violence is a potent trigger of social stressors and social structures to create biological outcomes. Understanding these processes has been proposed that specific factors linked to social stressors. Finally, some have suggested that the time has come to abandon the assumption of race in public health research and surveillance. However, the data reviewed here indicate that race/ethnic status remains a significant predictor of variance in both the living arrangements and the health of American women. It is necessary not only to continue collecting racial/ethnic data but also to assess these social group categories in their full diversity, with greater attention to assessing the specific factors linked to race/ethnicity that might affect health and appropriate interventions.

Research should also address the consistency of such racial and ethnic populations and design interventions that are similarly appropriate and that are not only health-related behaviors and beliefs but also the ways in which various behaviors and beliefs are embedded. The ultimate goal of such efforts should be to identify and test interventions that are effective in reducing social determinants of health and the key intervention strategies that may be necessary to decrease social determinants of health.