Social Geography, Minority Women and Public Health: Making Connections

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The purpose of this research is to address the health disparities that are prominent among minority populations, particularly African American and Hispanic/Latino American women. Cardiovascular disease is the leading cause of death for Americans along with diabetes. This research addresses the underlying causes for poor health among minority women in inner-cities. Social factors such as residential segregation and racism have not been accounted for as causes for poor health among minorities. Understanding the importance of these factors can lead to improvement in health care through implementation of policy which can benefit every American citizen.

Introduction

The primary purpose of this report is to explore the causes of poor health among minority women located in urban areas. Poor health among women of color is a consistent trend in the United States of America. While heart disease is the leading cause of death among all women in the United States, minority women, particularly African American and Hispanic/Latino women, suffer more from cardiovascular disease than White women. Poor health can be associated with socioeconomic status (SES), racism, poor dietary practices, and ethnicity. These connections are also related to the geographical location of these racial/ethnic groups, which are often concentrated in areas within the inner-city.

This report will concentrate on cardiovascular disease (CVD)/heart disease and diabetes mellitus (type 2) in a minority female population of West and North Philadelphia. Cardiovascular disease contains more than just one form of heart disease, with the majority of deaths coming from coronary heart disease. Ethnic and racial groups such as African Americans and Hispanic/Latino Americans have higher rates of heart disease than White Americans, as well as higher rates of mortality. Risk factors associated with heart disease include Type 2 diabetes, overweight/obesity, and high blood pressure/hypertension.

Millions of Americans are diagnosed with Type 2 diabetes. African American and Hispanic/Latino American populations have the highest rate of Type 2 diabetes along with a higher mortality rate when compared with White Americans. A chronic disease like diabetes is a

risk factor for cardiovascular disease. Diabetes is typically more prevalent in people of minority racial/ethnic backgrounds, and it is also influenced by family history, hypertension, overweight/obesity, and age.

An exacerbating factor is residential segregation within urban areas. By residential segregation, I refer to the spatial concentrations that reflect racial and economic patterns across urban neighborhoods. In this paper, I focus on the effect of residential segregation on the health of the minority populations that dominate inner city areas. Concentrating on urban planning and accessibility to health care, including to health insurance coverage, give better insight to the challenges that confront minority populations in inner cities.

The study exams the issues of residential segregation by focusing on Philadelphia, Pennsylvania, and concentrates on two areas of the city: West Philadelphia and North Philadelphia. West Philadelphia is predominantly an African American population and is characterized as a high poverty area. North Philadelphia has a high concentrated Hispanic/Latino population; both areas have high rates of uninsured and chronic illnesses. Residential segregation limits the ability to seek proper health care and proper nutrition.

The purpose of examining these two areas is to compare the segregated neighborhoods to the rest of Philadelphia. This geographic emphasis also focuses on connections linking health disparities with urban planning in conjunction with racism, particularly as it has contributed to segregation. By examining processes in urban geography in relation to the health of minority populations, this study will illustrate the importance of urban planning for public health.

A further objective of this study is to exam how socioeconomic status (SES) is an important aspect when observing the dynamics among race, sex and health disparities. The components of SES, income, education and occupation, determine the health of the population with regards to treatment and prevention. The relation between education, income and occupation is most often linked to the surrounding neighborhood. Those in the same income level have a tendency to live in the same areas.

In the following, I begin with an examination of the connections among urban planning and health, cardiovascular disease and diabetes. I then turn to a discussion of these issues as they affect the African American and Latina/o populations of West and North Philadelphia. I then conclude with some suggestions for improving urban access to medical care and educational information for inner city populations.

Background

The United States is the leading world power and a prosperous nation. However, when comparing it against other countries in terms of the health of its population, the country lags behind all of the other developed nations such as Canada, United Kingdom and Japan. For instance, in the year 2007, the longevity of Americans trailed other developed nations with an average life expectancy of 78 years, in comparison to Canada with 81 years, United Kingdom with 80 years and Japan with 83 years (Organization 2009).

In this report, there are two diseases I will focus on that contribute to the low life expectancy of Americans, they include cardiovascular disease (CVD) also known as heart disease and Diabetes Mellitus, referring to it as diabetes. Cardiovascular disease is prevalent globally and is the leading cause of death for a significant percentage of the global population. For the countries mentioned above, information from 2004 was taken to view the mortality rate per 100,000 populations from CVD. The U.S. was last, yet again, for the highest mortality rate

per 100,000 with 179 deaths, in comparison to Canada with 131 deaths, United Kingdom with 175 deaths and Japan with 103 deaths (Organization 2009). Diabetes is also wide spread but less prevalent than CVD. However, in the U.S it is ranked as one of the leading causes of death. In the following, I will analyze how cardiovascular disease and diabetes affect the longevity of Americans, particularly minorities, and how the prevalence among minorities relates to their access of inner city populations to health care.

General Health Information on the U.S. Total Population

In 2005 the average age for Americans was 77.8 years at birth. Females live longer, on average, than males, for all countries. The average life expectancy for American females in 2005 was 80.4 years, in comparison to males at 75.2 years. CVD is the leading cause of death in the United States. The most common condition of CVD is coronary heart disease, which is the most prevalent. Coronary heart disease leads to conditions such as heart attacks. The number of deaths sustained in 2005 from CVD was 652,091; this is 26.6% of the population who died from heart disease alone. Females had a higher mortality rate than males. Of the number of deaths from CVD 50.5% were female and 49.5% were male. Within the White population, 26.9% of the deaths came from heart disease. A higher percentage of the deaths came from the males with 27.2% in comparison to 26.7% for females (see, Table 1 and Table 2). (Statistics 2009)

Diabetes is also considered a leading cause of death in the United States, as well as a high risk factor for heart disease as well as other health conditions. In the year 2005, the total number of Americans who died from diabetes was 75,119 which are 3.1% of deaths caused by diabetes. Females had a higher percentage of deaths from diabetes compared to males. Females consisted of 51.4% of diabetes deaths in comparison to males with 48.6% of deaths. Of the total population White males comprised 2.9% of deaths from diabetes while White females comprised 2.8% of diabetes deaths (see, Table 1 and Table 2). (Statistics 2009)

When examining the health data in relation to access to insurance coverage and healthcare, the data also reveal some important connections. For the year 2007, studies showed that 15.8% of the population lacked health insurance and of that percentage 10.4% were non-Hispanic Whites (DeNavas-Walt 2008), with the overwhelming majority of the uninsured being women in racial minorities. The data shows that lack of health insurance deters many minorities from seeking medical care, as well as establishing a primary care provider, which means that this population does not have access to the preventive care that can stave off the onset of devastating diseases

Health of African Americans

When observing the differences in life longevity between races I found that African Americans shadow White Americans about five years overall. The average life expectancy for African Americans, including both sexes, was 73.2 years, in comparison to White Americans at 80.8 years in 2005. When comparing males from both races the life expectancy for African Americans was 69.5 years, while White Americans lived to about 75.7 years. While females live longer than their male counterparts, White females live longer than African American females.

In 2005, the life expectancy of African American females was 76.5 years, in comparison to White females whose life expectancy was 80.8 years. The percentage of deaths from CVD was 25.3% for African Americans. Unlike the White American population, a higher percentage of females died from heart disease than males. Of the black female population 26.3% of the deaths were due to CVD, in comparison to 24.4% for black males. The percentage of deaths from diabetes is lower (4.4%) than that of heart disease. However, African American females continue to have a higher percentage rate (5.0%) of the disease than African American males (3.8%). (Statistics 2009)

The lack of insurance for African Americans is almost twice that of White Americans. In 2007 there was a percentage of 19.5% African Americans who were uninsured (DeNavas-Walt 2008). A large portion of the African American community lives in poverty. Clinics and health centers located in low income areas are more likely to have poor service and be understaffed. The quality of care given to minorities reflects their income and access to health insurance. It is understood that African Americans have poorer health when compared to White Americans, which is a result from insufficient access to proper health care. African Americans who benefit from Medicare still face problems getting needed care than their White counterparts (Patel and Rushefsky 2008). Many African Americans depend on government insurance. If a budget cut were to take place, restricting services associated with Medicaid and Medicare, it could very likely have a disproportionate impact on the health of African Americans. Also, the quality and access of health care depend on the geographical location, discrimination, cultural and language barriers as well as income.

Health of Hispanic/Latino Americans

Hispanic/Latino Americans had a lower percentage rate of deaths from CVD than African Americans. Of the total causes of death, 22.5% were caused by heart disease. The percentage of deaths when considering male and female is the equivalent of African Americans, whereas more females (23.8%) died from heart disease than males (21.5%). Studies show that with diabetes, Hispanics had a higher percentage rate of deaths, with 5.1% of the Hispanic/Latino population who died from diabetes. By observing the percentage of deaths by gender I discovered that Hispanic/Latina females have a higher percentage (5.9%) death from diabetes than males (4.5%). (Statistics 2009)

Hispanic/Latino Americans Are less insured than African Americans. In 2007, 32.1% of Hispanics were uninsured (DeNavas-Walt 2008). The lack of insurance relates to the barriers of access to health care, which most often includes language and culture difficulties (Patel and Rushefsky 2008). Hispanic/Latino Americans are less likely to seek medical care. Lack of access to health care is more prevalent among Hispanic/Latina women, due to their low income status and low educational attainment. Also, Hispanic/Latino Americans are most often not given employer health insurance coverage, which in turn increases the number of Hispanic/Latino Americans that are uninsured (Patel and Rushefsky 2008).

Urban Geography: Philadelphia, PA

As of the year 2005, the life expectancy for Philadelphia Residences was 70.2 years for males and 78.5 years for females at birth. The leading cause of death for Philadelphia residences all ages was heart disease. Among the leading causes of death for the population also included

diabetes. In 2005, heart disease accounted for 25.9% deaths of non-Hispanic White males, in comparison to 33.6% of non-Hispanic White females. Overall, heart disease caused the death of 29.5% of the non-Hispanic White population (see, Table 3).(Lim Suet T 2005) The percentage of heart disease deaths for African Americans was 24.5%. African American males suffered 23.5% of deaths and females suffered 25.5% of deaths. Hispanic/Latino Philadelphia residents suffered 19.4% heart disease rates with 19.2% of male deaths and 19.6% female death (Lim Suet T 2006). There is a consistent trend in the health between male and female populations, with females have higher percentage rate in these diseases.

Higher rates of illness among women are very common, partially because women are poorer than men and live in lower income areas. Here, I focus on West Philadelphia, a predominately black neighborhood, and North Philadelphia, a predominately Hispanic neighborhood, to view the health among the two neighborhoods. In 2006, there were 586 deaths from heart disease in West Philadelphia. North Philadelphia had lower numbers with 544 deaths from heart disease. Diabetes deaths were significantly lower than heart disease. The number of deaths in Philadelphia for West Philadelphia was 55, while North Philadelphia had 75 deaths (Lim Suet T 2006) (see, Figure 1).

Methods

This study is an analysis that synthesizes information from several data sources in order to illustrate connections among public health, social identity and urban geography. For this analysis, I rely on data from the U.S. Census Bureau (2005-2007), from Philadelphia Vital Statistics (2005), as well as from reports on public health, minority populations and Philadelphia. The literature review shows that minority women have a higher prevalence of heart disease and diabetes. I am only using data for adult women above 18 years of age. I also use the data that indicates a significant relationship linking income, educational level and health statistics.

I am using these particular data sources to explain that health disparities among the minorities are not only related to genetics and biological makeup, but can evolve from outside social factors as well. The literature review is providing information of socioeconomic status (SES) and its connection to health, especially the minority population. I am also using this literature review to bring to light the effects of racism on health of minorities. This approach will shed light on the unfamiliar factors for health disparities within the United States. My hope is to use this analysis to offer some suggestions for policy. One suggestion is providing better health care, health care coverage and health awareness for low income areas. Another is using urban planning as a way to incorporate easier access to health care facilities and health food stores. These suggestions can be used to improve the quality of life among all Americans, but particularly minorities and women.

Results

Table1 indicates African American and Hispanic/Latino American populations have higher rates of mortality from diabetes and heart disease. African Americans have higher prevalence of diabetes and heart disease followed by Hispanic/Latino Americans, in comparison to White Americans. White Americans have a higher absolute number of deaths from heart

disease and diabetes for their population. Minorities have higher rates of deaths from these chronic diseases.

Table 1. Leading Causes of Death by Race and Hispanic Origin, United States, 2005[1]

Race and Hispanic Origin	Total Population	Cardiovascular Disease	Percentage	Diabetes	Percentage2
All Races[1]	2,448,017	652,091	26.6%	75,119	3.1%
non-Hispanic White	2,098,097	564,769	26.5%	59,755	2.8%
non-Hispanic Black	292,808	74,159	25.3%	12,970	4.4%
Hispanic	131,161	29,555	22.5%	6,665	5.1%

The results from Table 2, indicates females have a higher mortality rate from heart disease and diabetes in comparison to their male counterparts. Hispanic/Latina and African American females have a higher mortality rate than their White female counterpart as well as their male counterparts. African American and Hispanic/Latina American women have higher prevalence of heart disease and diabetes than White American women.

Table 2. Leading Causes of Death by Race and Gender, United States, 2005[1]

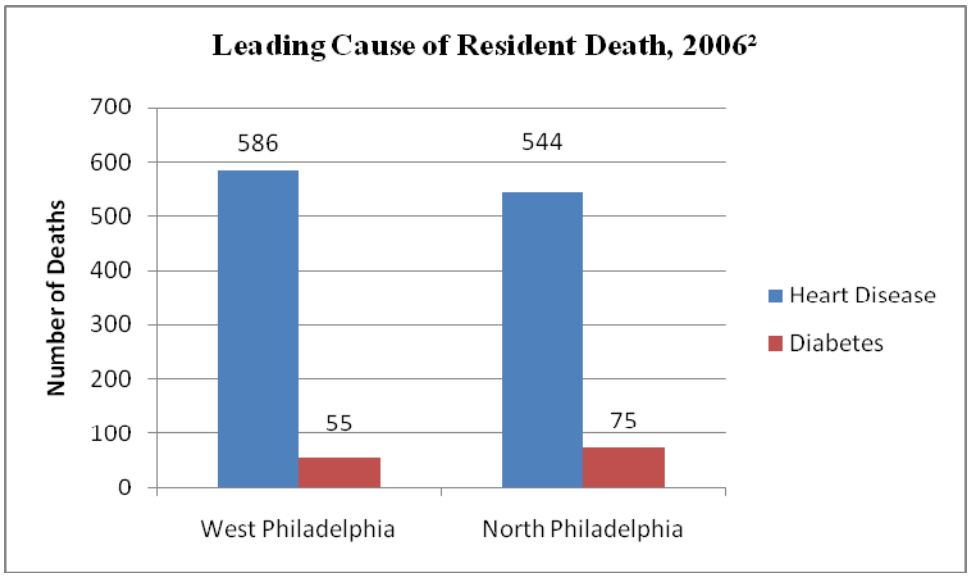
Gender	Total Population	Cardiovascular Disease	Diabetes
Male	1,207,675	26.7	3
White Male	1,028,152	27.2	2.9
Black Male	149,108	24.4	3.8
Hispanic Male	73,788	21.5	4.5
Female	1,240,342	26.5	3.1
White Female	1,069,945	26.7	2.8
Black Female	143,700	26.3	5
Hispanic Female	57,373	23.8	5.9

The results from Table 3, which was narrowed to Philadelphia, indicates the same outcome as Table 2, in which females still have higher mortality rate than males. The rate of heart disease and diabetes is also higher among African American and Hispanic/Latina American females in Philadelphia than their White female counterparts. Figure 1, indicates the number of deaths from heart disease and diabetes in two areas of Philadelphia.

Table 3. Cause of Death by Race and Gender in Philadelphia, 2005

Race/Gender	Heart Disease	Diabetes
White	29.5	1.9
Blacks	24.5	2.7
Hispanics	19.4	2.2
White Female	33.6	1.9
Black Female	25.5	2.9
Hispanic Female	19.6	3.8
White Male	25.9	1.8
Black Male	23.5	2.5
Hispanic Male	19.2	1.2

Figure 1. Number and cause of death for two areas in Philadelphia.



Discussion

I believe the reasons behind health disparities among minorities and women are embedded in societal structures. This includes economical, political and social geographical factors that have an impact on the everyday lives of Americans. The health care industry as well as the nation's foundation was based off patriarchal dominance, or rather, the male majority and hierarchy, particularly White males. The research on health of women and minorities lags severely behind White men. Although more research has been done on minority and women's health, they still suffer more chronic illnesses and higher death rates from disease such as heart disease and diabetes than their White male counterparts.

The prevalence of heart disease and diabetes is highest among minority women, particularly African American and Hispanic/Latina women. These results can be associated with the location in which these women live along with factors relating to the situations such as, socioeconomic status (SES), poor dietary practices, residential segregation, racism, lack of access to health and health care and poor urban planning. Figure 2 shows an interrelation between the geographical location and chronic illnesses, such as heart disease and diabetes.

Socioeconomic Status

Socioeconomic status (SES) is documented as being associated with poor health among minorities (Payne 1991; Barr 2008; Patel and Rushefsky 2008). SES is comprised of a person's income, educational attainment, and occupation (Auerbach, Krimgold et al. 2001). There is a relation of the three components, in which a person's income is influenced by the level of

occupation, which is obtained through the level of educational attainment. Taking this into account, majority of African Americans and Hispanic/Latino Americans have low levels of SES, because a high portion of their population lives below poverty. African American and Hispanic/Latina American women have the highest rate of poverty, especially African American women. African American women are more likely to be single mothers than Hispanic/Latina American and White American women. People with low income have poorer health status. Also, SES influences where a person lives. A person with low income will not be located in a wealthy neighborhood, which results in concentrated areas of poverty.

Residential Segregation

Concentrated areas of poverty are associated with residential segregation, in which minorities live in one area and Whites live in other areas. A large portion of minorities residing in urban areas are poor (Patel and Rushefsky 2008). Residential segregation can limit access to proper health care, education and job opportunities (Williams and Collins 2001). Also, there are lack of health food stores and an abundance of liquor and small grocery stores in minority areas, as opposed to White areas (Moore and Diez Roux 2006). The lack of proper nutritious food items contributes to the rise in high sodium, high fat, and affordable foods available to the minority population in these areas. The affordable healthy foods that can be available to poor population are located in supermarkets, which are located out of these areas (Moore and Diez Roux 2006). As a result, there is an increase in diabetes, obesity, hypertension, and heart disease among the population.

Philadelphia's history of housing accounted for the high concentration of poor blacks in West Philadelphia and North Philadelphia. "White flight" was a major contributor for the segregation of neighborhoods in the city, with White residences moving out to the suburbs along with jobs and businesses (Adams 1991). This event left many blacks without jobs and discrimination in real estate made it difficult to buy homes in descent areas (Williams and Collins 2001). Government housing added to segregation of the city by providing projects/apartments/community houses for African Americans who could not afford it (Wolfinger 2007).

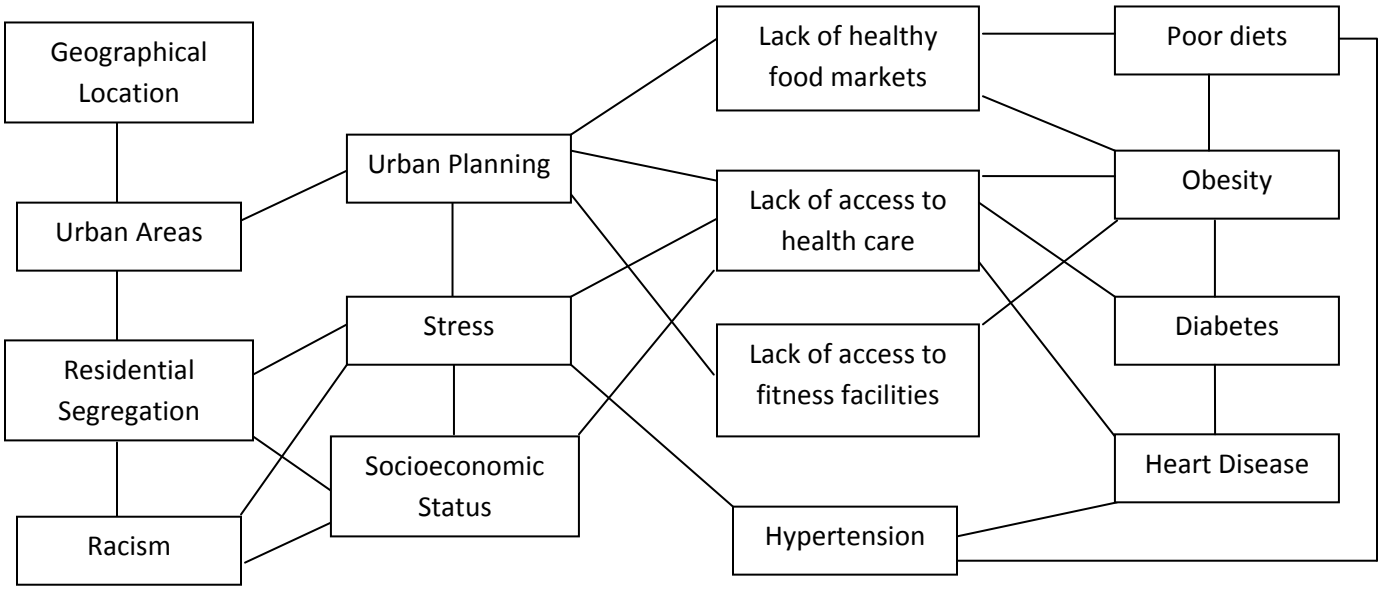
Located within poor areas of the city are poor quality health care systems. According to Patel 2008, these clinics are often understaffed and underfunded, which means they provide poor quality service. Uninsured residences are less likely to seek medical attention (Patel and Rushefsky 2008). Not having access to health care makes it harder to obtain proper health care coverage. Poor quality health care or limited access to health care can increase the likelihood of developing chronic illnesses such as diabetes and heart disease.

Stress and Hypertension

Stress is known to affect health status. Living in stressful environments can take a toll on a person's health, particularly women (Warren-Findlow 2006). Poverty, income, racism, segregation are stress factors (Graham-Garcia, Raines et al. 2001; Schulz, Parker et al. 2001). According to Graham-Garcia 2001, "African Americans are known to experience a more extreme degree of exposure to socioenvironmental stressors than are Caucasians". Stress is amplified more in women of these environments because they are more likely to suffer from poverty, due to being single mothers. Having low income leads to added stress because of financial burdens and not being able to provide the necessities for proper living. Language

barrier is an added stress factor, particularly for Hispanic/Latino Americans and as an implication it deters many from seeking medical attention and health care (Graham-Garcia, Raines et al. 2001). Outcomes of stress include poor dietary habits and hypertension. Poor dietary habits can lead to obesity which then can lead to diabetes and heart disease as well as other chronic illnesses. Hypertension is prevalent among African Americans. African American's have high rates of hypertension in comparison to Hispanic/Latino and White Americans (Metrosa 2006). Black women have the highest rate of hypertension, a most likely result of stress.

Figure 2. Flow chart of the relations between minorities and poor health.



Conclusion

In conclusion, there are many social factors involved in health disparities plaguing minorities. There is no root cause to poor health among African Americans and Hispanic/Latino Americans, but many that coexist and lead to other new factors. By addressing the few relations to poor health care, we can find new ways of resolving or reducing these health inequalities. The minority population suffers more because they are at a disadvantage, which is due to racism, segregation, location and SES. By addressing these issues in Connection to each other, this report indicates the importance of looking at the interwoven relationships of geography and social status that affect public health. I believe that by organizing urban planning to consider public health, including the accessibility of low income and minority populations to medical care, could make a positive impact on the overall health of urban populations in this country.

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