Commonly thought of as a childhood disease, asthma does not necessarily disappear in adulthood. In fact, it may develop or manifest in middle age. Asthma is a disease of the airways that is inflammatory and chronic in nature. The United States (U.S.) and other industrialized nations are experiencing an increase in asthma cases. Although many medical and scientific advances have been made in the treatment of asthma in the past few decades, racial and ethnic disparities persevere in the rates of prevalence, morbidity, and mortality in the U.S. (Joseph, et al., 2006). While the disparity is particularly high between White Americans and Hispanics of Puerto Rican descent, disparities between Black and White Americans are significant and enduring.

Asthma as a chronic condition continues to affect a significant portion of the U.S. population, according to statistics from the National Center for Environmental Health (2011). In 2009, one in 12 people (about 25 million, or 8% of the population) had asthma, compared with one in 14 people (about 20 million, or 7%) in 2001. Work related, or occupational, asthma was reported at 1.9 million cases among working adults, which accounted for about 15.7% of adult asthma cases. The afflicted age group for work-related asthma varies widely, but tends to be more concentrated in 45- to 64-year-olds (20.7%). There was a 6% increase in costs in the U.S. associated with asthma, including medical expenses, missed school and work days, and early deaths, from $53 billion in 2002 to about $56 billion in 2007. In 2008, 33% of adults with asthma missed on average five work days.

Over 7 million children in the U.S. suffer from asthma and related symptoms (Centers for Disease Control and Prevention, 2011). Asthma as a chronic disease has a significant effect on the child population and on the health care system. Additional statistics on asthma from the National Center for Environmental Health (2011) provide more information on asthma’s effects. Greater than half (53%) of the population suffering from asthma had an asthma attack in 2008. A higher percentage of children than adults with asthma suffered an attack (57% compared with 51%). In 2007, 185 children and 3,262 adults died from asthma. In 2009, one in 10 children had asthma compared with one in 12 adults. In 2010, three out of five children suffering from asthma had one or more asthma episodes in the previous year. In 2008, more than 59% of children with asthma missed on average four days of school.

In 2014, the most recent year with available data, 7.6% of White American adults had asthma, compared with 8.7% of African American adults (see Figure 1). The prevalence of asthma attacks for Black Americans was higher (4.6 to 5.8%) compared with White Americans (3.7% to 4.3%) in most years between 2001 and 2010 (Centers for Disease Control and Prevention, 2012). According to the same report, for each year from 2001 to 2009, the death rate for Black Americans was 1.6 to 2 times higher than that for White Americans.

These disparities do not appear to be decreasing. Bhan, Kawachi, Glymour, and Subramanian (2015) studied whether racial and ethnic disparities in the U.S. increased over time. After analyzing data from 3,868,956 adults across the U.S. from the Behavioral Risk Factor Surveillance System from 1999 to 2011, they concluded that disparities in asthma prevalence by race and ethnic group did not improve. Their findings confirmed earlier reports of patterns of racial disparities coupled with higher risks of asthma prevalence among non-Hispanic Blacks.

This disparity appears to have increased over time. Akinbami, Simon, and Rossen (2016) found that inequalities in asthma prevalence between Black and White children climbed continuously from 2001 to 2010. From 2001 to 2010, the authors found that among Black children, asthma prevalence trended
upward by an average of 3.8% (range, 11.4% to 16.8%). The ratio of Black children to White having asthma by the end of the reporting period was two to one.

The asthma trending analysis conducted by Akinbami, Moorman, Simon, and Schoendorf (2014) reports that between 2001 and 2010, asthma prevalence for African American youth (ages 0–17) increased from 1.4 to 2.0 times the asthma prevalence for White youth. African American youth experienced a greater number of exacerbations than White youth, and as a result had more school absences connected with emergency room visits/hospitalizations and a higher risk for mortality (Gupta, et al., 2006).

Castillo, Jordan, Tan, and Williams (2010) sought to discover the underlying causes for African Americans having higher rates of asthma and less than optimum health outcomes. The researchers’ findings point to various contributing social factors, including lack of access to health care, problems with communication, the social structure of neighborhoods, and the overall ecological properties of living in less than ideal conditions.

The Joint Center for Political and Economic Studies report The Economic Burden of Health Inequalities in the United States (LaVeist, et al., 2009) documents significant disparities in the cost of health inequalities in the U.S. The study found that from 2003 to 2006, 30.6% of direct medical care expenditures for African Americans, Asians, and Hispanics were due to health inequalities. For the same time period, if health disparities were eliminated, direct medical care expenses could have been reduced by $229.4 billion. Additionally, by eliminating health inequalities for minorities, indirect cost of care for illness and premature death could have been reduced by one trillion dollars. Furthermore, the combined costs for health inequalities and premature death in the U.S. for 2003 to 2006 amounted to $1.24 trillion. Lastly, to place the $1.24 trillion into perspective, it was calculated to be greater than the gross domestic product (GDP) of India, the world’s twelfth largest economy in 2008 (LaVeist, Gaskin & Richard, 2009).

The milestone 2002 report, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, recognizes the lack of insurance as a substantial driver of health care disparities (Institute of Medicine, 2002). Minority populations are more adversely affected by lack of insurance than by any other demographic or economic barrier. Because racial and ethnic minorities constitute about one-third of the U.S. population, about 50 million people are less likely to be insured (Smedley, 2008; HHS, 2011).

African American women with asthma are considered to be members of a high risk group. This subgroup provides opportunities to understand the relationships between health insurance coverage, financial burden perception, and asthma health outcomes. African American women are disproportionately afflicted by asthma in relation to high urgent care use, self-management prospects, and less than optimum health outcomes (Centers for Disease Control and Prevention, 2011).

Patel, Caldwell, Song, and Wheeler (2014) aimed to describe what factors made African American women with asthma, both those who had private insurance and those with public insurance, perceive a financial burden in managing their asthma. The researchers also looked for associations between the type of insurance coverage, the women’s perception of their financial burden, and their health outcomes related to asthma. Both groups of women expressed greater associations between out-of-pocket expenses and a greater perception of financial burden. The women who perceived asthma as a financial burden had poorly controlled asthma and “more urgent healthcare visits, lower household income, and report lower quality of life,” the researchers found.

One of the barriers to asthma management and a cause of lack of medication adherence could be the cost of prescription drugs, which may disproportionately affect African Americans due to generally lower levels of income and higher poverty rates. Due to the chronic nature of asthma, multiple medications may be prescribed to control symptoms (Patel et al., 2009).

The impact of associated direct and indirect costs of asthma are an incredible burden on the health care system infrastructure and on asthma patients and their families. Because African Americans are
disproportionately likely to have a low household income and to be uninsured, these costs are disproportionately harder for Black Americans to bear. The high cost of medication and high cost-sharing for co-pays for prescribed bronchodilators and ICS therapies are associated with lack of medication adherence (Patel, Caldwell, Song, & Wheeler, 2014; Bårnes & Ulrik, 2015). Decrease in medication adherence leads to adverse asthma outcomes, which are costly emergency department visits and inpatient hospital admissions.

It is a reality that asthma disparities are extremely complex, challenging, and multilayered. These layers are represented, not exclusively, as disparities in environmental, health system, care providers, health care policies and regulations, health care insurance coverage (public versus private), and individual/family beliefs and attitudes toward asthma. Since this chronic disease and its causes are multifaceted, several approaches or strategies should be implemented to reduce said disparities. A multipronged humanistic, societal, and financial model should be undertaken to reduce the asthma burden in the African American community. The most promising plan may be universal health care. Unfortunately, the current uncertain political and civic climates are barriers that may make this plan unattainable.

Title:
Health Disparity Asthma in African American Communities

Keywords:
African American, Asthma and Health Disparity

References:

Works Cited

(n.d.).


Abstract Summary:
The United States and other industrialized nations are experiencing an increase in asthma. Despite medical and scientific advances in treating asthma in the past few decades, racial and ethnic disparities persevere in the rates of prevalence, morbidity and mortality in the U.S. (Joseph, Williams, Ownby, Saltzgaber, & Johnson, 2006).

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- Status of ethnic disparities

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- Health care administration climate

First Primary Presenting Author

Primary Presenting Author

Enna Edouard Trevathan, DNP
University of San Francisco
School of Nursing and Health Professions at the University of San Francisco
Associate Dean
San Francisco CA
USA
Professional Experience: Associate Dean for Educational Outreach 01/2016-Present Assistant Dean for Educational Outreach 01/2015-01/2016 Co-Chair of RN Graduate Programs 10/2013- 01/2015 Assistant Professor& Director of the RN to MSN Online Program 09/2011 to 09/2013 Adjunct Faculty 09/2008 to 09/2011 University of San Francisco, San Francisco, CA Ambulatory Care Nurse Manager 09/2007 to 09/2011 Plan and direct activities of the Out-Patient Departments of Primary Care, Ear, Nose and Throat, Ophthalmology, Women Health and the Specialty Clinics. Santa Clara, Mountain View, Santa Teresa and San Jose, CA Service Unit Manager 09/2004 to 08/2007 Assistant Nursing Manager 08/2002 to 09/2004 Nursing Unit Manager 12/2001 to 08/2002 Managed and directed the operations of the Departments of Neurology, Nephrology, Respiratory, Chronic Care Management, Employee Health, Injection Clinics and Medicine. Collaborated with other Department Administrators, Chiefs of Service and physicians to develop and implement appropriate patient services and daily operations.

Author Summary: Dr. Trevathan obtained her Doctorate in Nursing Practice from the University of San Francisco in 2009. Dr. Trevathan is currently the Associate Dean for Educational Outreach at the SONHP-USF. This presentation has been published as a book contribution: Trevathan, E. (March, 2017). Health Disparity: Asthma in Africa American Communities. In R. G. Johnson III. Social Equity in a Time of Change: A Critical 21st Century Social Movement. (pp. xi-xvi). San Diego: Birkdale Publishers.