The Contributing Role of Health-Care Communication to Health Disparities for Minority Patients With Asthma*

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Asthma is a common, chronic illness with substantial morbidity, especially for racial and ethnic minorities in the United States. The care of the patient with asthma is complex and depends ideally on excellent communication between patients and health-care providers. Communication is essential for the patient to communicate the severity of his or her illness, as well as for the health-care provider to instruct patients on pharmacologic and nonpharmacologic care. This article describes evidence for poor provider/patient communication as a contributor to health-care disparities for minority patients with asthma. Communication problems stem from issues with patients, health-care providers, and health-care systems. It is likely that asthma disparities can be improved, in part, by improving patient/provider communication. While much is known presently about the problem of patient/provider communication in asthma, there is a need to improve and extend the evidence base on the role of effective communication of asthma care and the links to outcomes for minorities. Additional studies are needed that document the extent to which problems with doctor/patient communication lead to inadequate care and poor outcomes for minorities with asthma, as well as mechanisms by which these disparities occur.

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Key words: asthma; communication; disparity; ethnicity; health literacy; race

Abbreviations: ED = emergency department; ICS = inhaled corticosteroids; MDI = metered-dose inhaler

Race-Related Disparities in Asthma Outcomes and Care

Prevalence of Asthma Disparities

Asthma, a chronic disease characterized by airway inflammation, was active in 20 million people in the United States in 2002.[1] It accounts annually for 1.9 million emergency department (ED) visits, 12.7 million office visits, and an economic burden of $5.1 billion.[1,2] The burden of asthma in the United States, however, is not uniform. Compared to whites, the prevalence of asthma is particularly high in Puerto Ricans, non-Hispanic blacks, and American Indians. Asthma morbidity is strikingly higher in certain ethnic minority subgroups; for example, asthma-related hospitalization and mortality in African Americans is 1.4 to 4.0 times[3–5] and 1.3 to 5.5 times[6–9] more likely, respectively, than in whites.

Reasons for these disparities are numerous, and include potential differences in income, education, genetic susceptibility, environmental exposure, and the quality of care. Some studies[7,8,10] have suggested that poor outcomes among African Americans with asthma may reflect socioeconomic factors, including financial barriers to adequate care. However, others[3–5,11,12] have found that differences in socioeconomic status and health insurance coverage between patients only partially explain race differences in health care for asthma. A number of investigations have evaluated the relation-

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ship of race to the quality of asthma care received by patients in the United States. Studies suggest that even when minority patients have equal access to health-care services, the quality of health care and resulting health outcomes will often be poorer than that of white patients. For example, two studies[13,14] of patients with asthma reported that African Americans enrolled in managed care organizations were less likely than whites to use inhaled corticosteroids (ICS), the most commonly prescribed medications to maintain long-term asthma control. Another study,[15] conducted in > 5,000 patients enrolled in 16 managed care organizations across the United States, found significantly more African Americans than whites reported underutilization of controller asthma medications (*eg*, daily ICS use, 34.9% vs 54.4%, p = 0.001, African Americans vs whites) and inadequate levels of self-management education (how to avoid triggers, 37.6% vs 53.6%, p = 0.001, and having an action plan for use during an exacerbation, 42.0% vs 53.8%, p = 0.001).

Causes of Asthma Disparities

While there is growing evidence showing that the quality of asthma care for minorities is worse than the care received by whites, there is very little known about the reasons for unequal care.[15] Studies[16–20] of other chronic diseases suggest that both quantitative and qualitative differences in medical care may contribute to variations in outcomes by race. In a report[21] by the Institute of Medicine, "Unequal treatment: confronting racial and ethnic disparities in healthcare," the expert panel concluded that that there are many sources of disparities, including health systems, health-care providers, patients, and utilization managers. With regard to health-care providers, the panel stated that there is indirect evidence that bias, stereotyping, prejudice, and clinical uncertainty may contribute to unequal outcomes. While there is some evidence that minority patients may be more likely to refuse certain treatments, patient refusal rates are generally small, and do not fully explain health-care disparities.

The Contributing Role of Poor Patient/Provider Communication to Asthma Disparities

Poor Provider/Patient Communication May Be More Common for Minority Patients

National guidelines for asthma care contained in the 1997 National Heart, Lung, and Blood Institute-sponsored expert panel report[22] highlight the importance of active partnership between patients and physicians. This partnership is highly relevant for effective communication about asthma symptoms, medications, and appropriate self-management (*eg*, education to avoid triggers and intensify medication regimens during exacerbations). However, a number of studies[23–26] have reported that differences in race and ethnicity between patients and their providers can represent important cultural barriers to effective communication and partnerships for care. Patient factors such as language barriers, low health literacy and educational status, and lack of self-efficacy, which may be more prevalent among low-income minorities, may contribute to the risk of poor patient/provider communication in this population. Physician factors that may contribute to impaired communication between minority patients and their providers (often from dissimilar race/ethnicity as their patients) include unintentional racial biases in interpreting patient symptoms and decision making,[19] and poor provider understanding of patients' ethnic and cultural disease models and expectations from clinical encounters. Despite the fact that the great majority of health-care providers abhor prejudice and make every effort to deliver health care that is fair and equal to all patients, the Institute of Medicine report[21] concluded that the preponderance of evidence suggests that inadvertent bias, stereotyping, prejudice, and clinical uncertainly are likely important contributing factors to health-care disparities. Finally, health-care system factors may also contribute to poor patient/provider communication, for example, by placing overly restrictive time constraints on the health-care encounter or by failing to have culturally and literacy-appropriate educational materials available for use by health-care professionals.

A previous report[27] showed that physician attitudes toward their asthma patients may influence both the quality of communication and the quality of asthma care. Resulting impairments in communication may thus contribute to ineffectual partnerships for care between patients and their providers in managing chronic illnesses, leading to disparities in health outcomes from chronic disease such as asthma.[28] In a study of office visits in primary care, Johnson et al,[29] showed that physicians were more verbally dominant and engaged in less patient-centered communication with African-American than white patients. Positive affect was less apparent also for African Americans and their doctors compared with whites and their doctors.

The idea that communication is somehow less adequate uniformly across minority patients is not supported by all available evidence. A study by Clark et al[30] of low-income, urban parents and children found that mothers who prefer to speak Spanish communicated more frequently about asthma, more about home treatments for asthma, and they had higher levels of management of recent asthma at-