Disparities in outcomes from chronic disease

Impaired patient-physician partnerships may be an important cause in minorities

Papers pp 962, 967

Recent developments in basic biomedical research offer the great promise that we will increasingly understand factors that underlie risk and expression of disease and, with further advances in genetic engineering, translate this knowledge into highly individualised treatments to reduce the burden from both acute and chronic diseases. Two studies in this issue, however, remind us that this idealised world of risk prediction and tailored treatments will have to succeed in the real world of cultural and ethnic diversity and imbalances in socioeconomic status.

Chalmers et al (p 967) report findings from a cohort study examining the relations between socioeconomic status and chronic disease and mortality in Scotland.[1] Consistent with studies in other patient populations,[2 3] individuals in the lowest socioeconomic quintile were at higher risk of several major diseases and were likely to die at a younger age than those in the highest quintile. Similar gradients in health with increasing socioeconomic status have been shown in studies examining the upper strata of socioeconomic status and in populations with and without universal access to health care,[4 5] suggesting that, although adequate income and affordable health insurance may be necessary, they are not by themselves sufficient to eliminate disparities in health. This realisation has aroused considerable attention by researchers in recent years to identifying other potential determinants of the socioeconomic-health gradient. Through these efforts, it is becoming increasingly clear that this gradient evolves from a complex web of inter-related factors leading to differences in use of health care, environmental exposures, and psychosocial stressors (for example, racism, social status, and depression) across patient populations.[6 7]

In the United Kingdom asthma related morbidity among minority populations (for example, south Asians) is several times higher than in white patients, paralleling the discrepancies observed in the United States for African-American and Hispanic patients.[8 9] Since these minorities tend to be disproportionately represented in the lower strata of socioeconomic status, the relation between race and ethnicity and health outcomes is likely to represent, at least in part, confounding from other factors responsible for the socioeconomic-health gradient. Indeed, the paper by Griffiths et al in this issue (p 962) offers a clear illustration of how various factors related to patients and providers may together contribute to ineffective utilisation of care and disparities in outcomes from asthma.[10] Griffith et al interviewed 58 south Asian and white adults with asthma and 25 providers in London to learn about their perceptions of asthma and asthma care. The results suggest that several factors related to patients, including limited self efficacy (perceived ability to carry out prescribed therapy), low outcomes expectancy (perceived benefit of treatments prescribed by their physicians), and lack of knowledge about appropriate asthma care (for example, over-reliance on acute symptom relief), may significantly contribute to deficiencies in care for asthma in this population. Investigators also uncovered several factors related to clinicians that interfered with optimal care for asthma, including the lack of awareness or agreement regarding appropriate treatment (for example, systemic corticosteroids for exacerbations), perceived barriers to teaching self management of asthma, and inadequate availability of primary care physicians for urgent consultations.

Although these barriers to effective partnerships for care between patients and clinicians were present among white and south Asian patients, they were overrepresented among the south Asians. Taken together with results of previous studies, these data suggest that impaired patient-physician partnerships for care, particularly among patients from minority groups, limit the opportunity to improve outcomes from chronic diseases.[11–14] Such observations provide a strong reminder that further improvements in health will depend not only on efforts to better understand the genetic and environmental determinants of disease but also, as importantly, on efforts to understand and eliminate barriers to equitable health outcomes.

Jerry A Krishnan *instructor*
(satish@jhmi.edu)

Gregory B Diette *assistant professor*
Cynthia S Rand *associate professor*

Division of Pulmonary and Critical Care Medicine, Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD 21224 USA

1 Chalmers J, Capewell S. Deprivation, disease, and death in Scotland: graphical display of survival of a cohort. *BMJ* 2001;323:967-8.
2 Chen Y, Tang M, Krewski D. Relationship between asthma prevalence and income among Canadians. *JAMA* 2001;286:919-20.
3 Shen JJ, Wan TT, Perlin JB. An exploration of the complex relationship of socioecologic factors in the treatment and outcomes of acute myocardial infarction in disadvantaged populations. *Health Serv Res* 2001;36:711-32.
4 Haan MN, Kaplan GA, Syme SL. Socioeconomic states and health: old observations and new thoughts: In: Bunker JP, Goby DS, Kehrer BH, eds. *Pathways to health*. Menlo Park, CA: Henry J Kaiser Family Foundation, 1989:76-135.
5 Adler NE, Boyce T, Chesney MA, Cohen S, Folkman S, Kahn RL, et al. Socioeconomic status and health: the challenge of the gradient. *Am Psychol* 1993;49:15-24.
6 Adler NE, Boyce WT, Chesney MA, Folkman S, Syme SL. Socioeconomic inequalities in health: no easy solution. *JAMA* 1993;269:3140-5.
7 Williams DR. Race, socioeconomic status, and health. The added effects of racism and discrimination. *Ann N Y Acad Sci* 1999;896:173-88.
8 Ayres JG. Acute asthma in Asian patients: hospital admissions and duration of stay in a district with a high immigrant population. *Br J Dis Chest* 1986;80:242-8.
9 Mannino DM, Homa DM, Pertowski CA, Ashizawa A, Nixon LL, Johnson CA, et al. Surveillance for asthma—United States, 1960-1995. *MMWR Weekly* 1998;47(SS-1):1-28. www.cdc.gov/epo/mmwr/preview/mmwrhtml/00052262.htm
10 Griffiths C, Kaur G, Gantley M, Feder G, Hillier S, Goddard J, et al. Influences on hospital admission for asthma in south Asian and white adults: qualitative interview study. *BMJ* 2001;323:962-6.
11 Pachter LM, Weller SC. Acculturation and compliance with medical therapy. *J Dev Behav Pediatr* 1993;14:163-8.
12 Weller SC, Baer RD, Pachter LM, Trotter RT, Glazer M, Garcia De Alba Garcia JE, et al. Latino beliefs about diabetes. *Diabetes Care* 1999;22:722-8.
13 Brown SA, Hanis CL. A community-based culturally sensitive education and group-supervised intervention for Mexican Americans with NIDDM: a pilot study of efficacy. *Diabetes Educ* 1995;21:203-10.
14 Cooper-Patrick L, Gallo JJ, Gonzales JJ, Vu HT, Powe NR, Nelson C, et al. Race, gender, and partnership in the patient-physician relationship. *JAMA* 1999;282:583-9.

BMJ 2001;323:950

We ask all editorial writers to sign a declaration of competing interests (bmj.com/guides/confli.shtml#aut). We print the interests only when there are some. When none are shown, the authors have ticked the "None declared" box.