2 Cullingford GL, Watkins DN, Watts AD, Mallon DF. Severe late postsplenectomy infection. *Br J Surg* 1991;78:716-21.
3 King H, Shumacker HB Jr. Splenic studies. I. Susceptibility to infection after splenectomy performed in infancy. *Ann Surg* 1952;136:239-42.
4 Evans DI. Postsplenectomy sepsis 10 years or more after operation. *J Clin Pathol* 1985;38:309-11.
5 Bisharat N, Omari H, Lavi I, Raz R. Risk of infection and death among post-splenectomy patients. *J Infect* 2001;43:182-6.
6 Schwartz PE, Sterioff S, Mucha P, Melton LJ 3rd, Offord KP. Postsplenectomy sepsis and mortality in adults. *JAMA* 1982;248:2279-83.
7 Guidelines for the prevention and treatment of infection in patients with an absent or dysfunctional spleen. Working Party of the British Committee for Standards in Haematology Clinical Haematology Task Force. *BMJ* 1996;312:430-4.
8 Davies JM, Barnes R, Milligan D. Update of guidelines for the prevention and treatment of infection in patients with an absent or dysfunctional spleen. *Clin Med* 2002;2:440-3.
9 Kyaw MH, Holmes EM, Chalmers J, Jones IG, Campbell H. A survey of vaccine coverage and antibiotic prophylaxis in splenectomised patients in Scotland. *J Clin Pathol* 2002;55:472-4.

Medical needs of immigrant populations

Will lead to new challenges for the NHS in future

The world's population has doubled over the past 50 years.[1] The annual growth rate of 1.3% will result in a further increase to around 9 billion by 2050. Nearly a third of this growth is attributed to three countries in South Asia—namely India (21%), Pakistan (5%), and Bangladesh (4%)—which have historic, cultural, and economic ties with the United Kingdom. According to the International Organisation for Migration, the total number of migrants worldwide increased from 84 million in 1975 to 175 million by 2000,[2] and by 2050 it may have reached 230 million.

Meanwhile, the global population of elderly people is increasing. By 2050 the overall growth rate of 2.4% per year will result in a threefold increase in the number of people aged 60 or older to 2 billion, with eight out of every 10 elderly people living in developing countries.[3]

Large demographic changes will occur in Europe.[4] The current population of the European Union of 452 million will shrink to around 400 million despite its current inward migration rate. Populations in some European countries will decrease by a quarter while becoming considerably older. By 2050 the proportion of elderly people is expected to have risen from 20% to 37%, with a big impact on Europe's economies and social infrastructures.

These trends in international migration and population ageing will probably increase the influx of South Asians to the United Kingdom. Many will bring elderly relatives with them given that, in Asian countries, 70% of elderly people live with their children. In the UK over the past decade the ethnic minority population has grown by 53% and now comprises 7.9% of the total population.[5] South Asians, the largest ethnic minority group, now number two and a half million people and account for 50% of ethnic minority groups, with another 15% of the ethnic population described as of mixed race. Although increasing immigration may provide a welcome solution to such shrinking and ageing among Europe's populations[6] it will almost certainly have a substantial impact on health services such as the NHS, because South Asians have higher rates of coronary heart disease, diabetes, hypertension, stroke, hip fractures, and renal failure.[7 8]

So what needs to be done? The European Union must encourage managed migration. The union needs cohesive policies for immigration and health which can respond properly to the medical needs of the migrant population. First, though, policy makers should assess the likely effects of further migration on health services before enforcing big changes in the numbers of migrants. Ill conceived and short sighted attempts to develop services could prove to be a disastrous knee jerk reaction.

The UK currently allows in 150 000 migrants a year. Those in charge of developing and modernising the NHS should take account of the rapidly changing demography of the nation, understand better the needs of ethnic minority populations, and target health promotion at people in those populations who are at high risk of disease.

Basic and postgraduate training for doctors, nurses, and professions allied to medicine must include learning about ethnic diversity and transcultural medicine, while academics must more widely debate and develop capacity for clinical research in transcultural medicine.[9] Meanwhile, royal colleges, specialist societies, voluntary organisations, patients' groups, and community leaders could do much more to promote and share expertise on the health of people from ethnic minorities.

Lastly, exchange programmes for health professionals in the UK and less developed countries would allow dissemination and adaptation of the UK's substantial knowledge in managing diseases of old age and chronic diseases, as well as of health service finance and management.

Shahid Anis Khan *consultant physician*
Partha Ghosh *consultant physician*

(shahidak@aol.com)

Elderly Care and General Medicine, Lister Hospital, Stevenage SG1 4AB

Competing interests: None declared.

1 United Nations. *World population prospects: the 2002 revision*. New York: UN Publications, 2002. www.un.org/esa/population/publications/wpp2002/WPP2002-HIGHLIGHTSrev1.PDF (accessed 30 Mar 2005).
2 International Organisation for Migration. *Report. World migration 2003: managing migration. Challenges and responses for people on the move*. New York: UN Publications, 2003. http://noc.iplexx.at/~admin19/en/images/uploads/WMR_FLYER%20Vienna2_1085668151.pdf (accessed 30 Mar 2005).
3 United Nations. *Migration patterns and policies in the Asia and Pacific region*. Asian Population Studies series. Series No: 160, 2003. New York: UN Publications, 2003. www.unescap.org/esid/psis/population/popseries/apss160/index.asp (accessed 30 Mar 2005).
4 United Nations. *World economic and social survey 2004. Part II*. UN Publications, 2004. www.un.org/esa/policy/wess/wess2004files/part2web/part2web.pdf (accessed 30 Mar 2005).
5 Office for National Statistics. *Census, April 1991 and 2001*. www.statistics.gov.uk/cci/nugget.asp?id=455 (accessed 28 Jul).
6 United Nations. *A Europe open to well managed migration will be fairer, richer, stronger, says secretary-general in Brussels address*. Press release SG/SM/9134. New York: UN Publications, 2004. www.un.org/News/Press/docs/2004/sgsm9134.doc.htm (accessed 30 Mar 2005).
7 Department of Health. *Health survey for England 1999. The health of minority ethnic groups*. www.dh.gov.uk/PublicationsAndStatistics/PublishedSurvey/HealthSurveyForEngland/HealthSurveyResults/HealthSurveyResultsArticle/fs/en?CONTENT_ID=4015530&chk=cKvNuP (accessed 30 Mar 2005).
8 Bhopal R. Epidemic of cardiovascular disease in South Asians. *BMJ* 2002;324:625-6.
9 Rathore SS, Krumholz MH. Race, ethnic groups, and clinical research. *BMJ* 2003;327:763-4.

BMJ 2005;331:418