

## Continuing professional development

# Ethnicity and musculoskeletal health: census and consensus

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### Introduction

The first release from the Office for National Statistics (ONS) on 16 July 2012 of the 2011 UK census indicates that in the first decade of the twenty-first century the population of England and Wales has risen by 3.7 million (from just over 50 million, an increase of about 7%), and over 50% of this increase consists of migrants. In general, the term 'migrant' is associated with recent arrivals in a foreign country. In the UK, migrants who have been in the country for a while, including their descendants, are described as belonging to *ethnic minorities*. The trajectory for the future suggests that, in 20 years' time, the total population of England and Wales will have risen to 70 million. It is expected that migrants will account for two-thirds of this increase. In the UK as a whole, approximately 15% of the total population will be of migrant origin, equivalent to about one in six or possibly more. This is considerably higher than the current figure (about 4%) or any projected figures for the European Union (EU).

### Resources

- Release: *2011 Census, Population and Household Estimates for England and Wales*. [www.ons.gov.uk/ons/guide-method/census/2011/index.html](http://www.ons.gov.uk/ons/guide-method/census/2011/index.html)
- United Nations Department of Social Affairs (2009) *United Nations: trends in international migrant stock. The 2008 revisions*. United Nations database, PDP/DB/MIG/Stock/Rev.2008. New York: United Nations Department of Social Affairs, Population Division.
- WHO Regional Office for Europe (1998) *The Tallinn Charter Health System for Health and Wealth*. Copenhagen: WHO Regional Office for Europe.

### Access to healthcare

In the UK there is extensive legislation that imposes a duty on the NHS to provide all reasonable healthcare requirements for all of its users. Equality legislation prohibits direct or indirect discrimination of any kind on the basis of race, which is defined as a *protected characteristic*. Although the right to health is enshrined in many legal instruments, there are a number of obstacles to migrant/ethnic minority populations receiving appropriate healthcare. These include linguistic barriers, lack of familiarity with the health system, and cultural or other barriers that may impede access to services.

### Resources

- National Health Service Act 2006
- Health Act 2009
- Equality Act 2010
- Johnson MRD (2003) Ethnic diversity in social context. In: Kai J (ed.) *Ethnicity, Health and Primary Care*. Oxford: Oxford University Press. pp. 3–13.
- Gill P, Kai J, Bhopal RS *et al* (2002) Black and minority ethnic groups. In: Stevens A, Raftery J, Mant J *et al* (eds) *Healthcare Needs Assessment: epidemiologically based needs assessment reviews*, 3rd series. Oxford: Radcliffe Medical Press.

### Disease variations and outcomes

Long-term conditions are associated with higher mortality. Clinical variations in the epidemiology of conditions such as rheumatoid arthritis and systemic lupus erythematosus (SLE) have been described in British South Asians. These patients with SLE have

been noted to have much more aggressive disease and higher mortality rates than their white counterparts.

## Resources

- Samanta A, Samanta J, Johnson MRD *et al* (2005) Rheumatoid arthritis in minority ethnic groups: patterns of disease, clinical and sociocultural features among British South Asians. *Diversity in Health and Social Care* 2:99–118.
- Samanta A, Feehally J, Roy S *et al* (1991) High prevalence of systemic disease and mortality in Asian subjects with systemic lupus erythematosus. *Annals of the Rheumatic Diseases* 50:490–2.
- Samanta A, Roy S, Feehally J *et al* (1992) The prevalence of diagnosed systemic lupus erythematosus in whites and Indian Asian immigrants in Leicester City, UK. *British Journal of Rheumatology* 31:679–82.

## Rheumatoid arthritis

National guidelines champion the principle of early diagnosis and treatment of rheumatoid arthritis with specific disease-modifying anti-rheumatic drugs (DMARDs), ideally within 3 months of the onset of symptoms. A multicentre audit of rheumatoid arthritis in minority ethnic groups showed that a high proportion (62%) exceed the 3-month time interval for specialist referral, and there is a delay in the initiation of DMARD therapy of more than 3 months, more than 6 months and more than 9 months in 8%, 1% and 10%, respectively, of South Asian patients.

A significant delay in the time taken for presentation of South Asian patients with rheumatoid arthritis to primary care physicians has been reported from Birmingham. The median time taken for presentation to primary care was 24 weeks after the onset of symptoms for South Asians, compared with 12 weeks for non-South Asian patients. A number of causal and attitudinal factors were identified which resulted in patients from minority ethnic groups deploying non-medical self-management strategies instead of seeking medical advice.

Addressing the needs of black and ethnic minority groups can be complex, as these communities have a diverse set of social beliefs, values, languages and cultural attitudes. There is a generalised belief that arthritis is completely dependent upon factors such as 'good' and 'bad' foods, or that it is a result of divine intervention. Rheumatoid arthritis may incur stigma, and there is a tendency for minority groups to prefer alternative therapies such as homeopathy, prayer and meditation. In a retrospective study of ethnic differences

in response to DMARDs among patients with inflammatory arthritis, people of South Asian ethnicity stopped therapy sooner than North Europeans. Possible explanations for this included problems with effective communication, cultural differences in expectations and response to illness. Recent studies have shown increased pain and disability in South Asian patients with rheumatoid arthritis compared with their Northern European counterparts.

## Resources

- National Institute for Health and Clinical Excellence (2009) *Rheumatoid Arthritis: the management of rheumatoid arthritis in adults*. NICE Clinical Guideline CG79. London: National Institute for Health and Clinical Excellence.
- Panchal S, Moorthy A, Hayat S *et al* (2012) A national audit of patients with rheumatoid arthritis of black and minority ethnic origin. *Annals of Rheumatic Disease* 71(Suppl. 3):465.
- Kumar K, Gordon C, Toescu V *et al* (2008) Beliefs about medicines in patients with RA and SLE: a comparison between patients of South Asian and White British origin. *Rheumatology* 47:690–7.
- Adebajo AO, Blenkinron L and Dieppe P (2004) Patient education for diverse populations. *Rheumatology* 43:1321–3.
- Samanta A, Shaffu S, Panchal S *et al* (2012) Tinkering at the edges or collaborative symbiosis? Ethnicity and rheumatology: a consensual review discussion. *Diversity and Equality in Health and Care* 9:000–000.
- Kett C, Flint J, Openshaw M *et al* (2010) Self-management strategies used during flares of rheumatoid arthritis in an ethnically diverse population. *Musculoskeletal Care* 8:204–14.
- Odutola J and Ward MM (2005) Ethnic and socioeconomic disparities in health among patients with rheumatic disease. *Current Opinion in Rheumatology* 17:147–52.
- Helliwell PS and Ibrahim G (2003) Ethnic differences in response to disease-modifying drugs. *Rheumatology* 42:1197–201.
- Ghelani A, Mastana S and Samanta A (2011) *Rheumatoid Arthritis among South Asian and Caucasian Populations of the East Midlands in the UK: a genetic and bio-demographic analysis*. Saarbrücken, Germany. VDM Verlag Dr. Muller.
- Griffiths B, Situnayake RD, Clark B *et al* (2000) Racial origin and its effect on disease progression and HLA-DRB1 types in patients with rheumatoid arthritis: a cross-sectional study. *Rheumatology* 39: 857–64.

## Psoriatic arthritis

There is a paucity of data on the effects of ethnicity on psoriatic arthritis. Data from Asia show a prevalence of 10–100 per 100 000 members of the population in China, and 0.1–1 per 100 000 in Japan. In Singapore, psoriatic arthropathy is more common in the Indian population than among the Chinese population, and therefore Indian ethnicity is acknowledged as a risk factor for arthritis. However, a recent observational study noted that there is a significant difference in disease perception (tender joint count) and pain and health assessment scores among Gujarati patients with psoriatic arthritis compared with their Caucasian counterparts.

### Resources

- Tam LS, Leung YY and Li EK (2009) Psoriatic arthritis in Asia. *Rheumatology* 48:1473–7.
- Thumboo J, Tham SN, Tay YK *et al* (1997) Patterns of psoriatic arthritis in Orientals. *Journal of Rheumatology* 24:1949–53.
- Malipeddi A and Hassan W (2011) *Do Gujarati Indian Patients Have More Severe Psoriatic Arthritis Than Caucasian Patients? An outpatient-based study*. Zürich: EULAR Congress Abstract Book, European League Against Rheumatism.

## Osteoporosis

Bone mineral density (BMD) has been found to be lower in the South Asian (Gujarati) population than in the local white population in Leicestershire. A significant trend towards vitamin D deficiency in South Asians appears to be the main causative factor, especially in view of the fact that vitamin D levels have been found to have a positive effect on bone mineral density. There is little information available about osteoporosis or osteomalacia for minority ethnic groups. The information on osteomalacia that is available is of limited benefit, as its cultural competence is open to question.

### Resources

- Hamson C, Goh L, Sheldon P *et al* (2003) Comparative study of bone mineral density, calcium and vitamin D status in the Gujarati and white populations of Leicester. *Postgraduate Medical Journal* 79:279–83.

- Roy D, Berry JL, Pye SR *et al* (2007) Vitamin D status and bone mass in UK South Asian women. *Bone* 40:200–4.
- Samanta A, Johnson MRD, Guo F *et al* (2009) Snails in bottles and language cuckoos: an evaluation of patient information resources for South Asians with osteomalacia. *Rheumatology* 48:299–303.
- Johnson MRD, Samanta A, Hudson N *et al* (2006) *Evaluation of Patient Information Resource on Osteomalacia in Asian Languages*. Seacole Research Paper 5. Leicester: Mary Seacole Research Centre, DeMontfort University.

## Census and consensus

To date, the focus on musculoskeletal health in minority ethnic groups in the UK has been lamentably limited. The recent 2011 UK census indicates a rapidly growing trend towards the UK becoming an even more pluralistic multi-ethnic society. If musculoskeletal health is to be truly meaningful for minority ethnic groups, a consensus on good practice is required. Good practice needs to seamlessly extend across the levels of policy, provider organisations and healthcare workers in order to integrate strategy and implementation that is culturally competent for ethnic minority groups.

### Good practice for policy level

- Enactment of legislation and policy for ethnic-minority health
- Development of a robust database for service users on the causes of musculoskeletal disorders
- Incorporation of musculoskeletal health for ethnic minorities into an intercultural healthcare programme

### Good practice for provider organisations

- Developing culturally and linguistically appropriate services for musculoskeletal health
- Cultivating links with local ethnic minority communities
- Targeting health promotion for musculoskeletal health to reach ethnic minorities effectively

**Good practice for healthcare workers**

- Mobile health units to bring outreach services to vulnerable groups
- Training in cultural competence
- Better communication through cultural mediation

**Resources**

- Rachel B, Mladovsky P, Deville W *et al* (2011) *Migration and Health in the European Union*. Maidenhead: Open University Press.
- Mladovsky P, Ingleby D, McKee M *et al* (2012) Good practices in migrant health: the European experience. *Clinical Medicine* 12:248–52.
- Samanta A, Shaffu S, Panchal S *et al* (2012) Tinkering at the edges or collaborative symbiosis? Ethnicity and rheumatology: a consensual review discussion. *Diversity and Equality in Health and Care* 9:000–000.

**Summary**

- There is a growing ethnic minority population in the UK, of which South Asians currently represent the largest group. There is a paucity of data on musculoskeletal health in this group.

- Members of ethnic minority groups with rheumatoid arthritis tend to access the healthcare system at a late stage, and are more inclined to discontinue their medication for rheumatoid arthritis.
- There are a number of non-medical cultural beliefs about the causes of arthritis, and alternative approaches to therapy are preferred to conventional medicine.
- There is a paucity of culturally competent educational material related to musculoskeletal conditions.
- Observational studies have shown clinical variations in rheumatoid arthritis, systemic lupus erythematosus and psoriatic arthritis in ethnic minorities. There is a need to understand and address social beliefs, language and culture in order to achieve optimal healthcare.
- Coordinated good practice at the level of policy makers, provider organisations and healthcare workers is required to ensure that ethnic minority groups have access to healthcare services that are responsive to their needs.

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