

The quest for culturally sensitive health-care systems in Scotland: insights for a multi-ethnic Europe

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ABSTRACT

Health systems are serving increasingly ethnically diverse populations. This requires cultural sensitivity/competence. Sharing insights from multi-ethnic countries is important. Insights from Scotland, discussed in this paper, include that the creation of culturally sensitive health systems requires reduction of stigma associated with immigration and immigrants; the wider use of ethnicity alongside, or instead of, race, country of birth, nationality and immigrant status; prioritization of actions using the concept of inequity; understanding that meeting the needs of minorities improves health systems for everyone; more use of anti-discriminatory laws to drive national policy and locality planning; research to assess needs and effectiveness; evaluation of processes and outcomes; institutional and professional sincerity and confidence, and monitoring that policies are implemented and working. Even when conditions are favourable, as in Scotland, the challenges are many, implementation is tough and timescales long. Scotland's record is, nonetheless, comparatively strong in Europe. Sharing experience across national boundaries should spur on progress globally.

Keywords ethnicity, public health, cultural sensitivity, health-care systems

Introduction

Modern health-care systems are challenged to meet the needs of increasingly ethnically diverse populations.¹ Meeting these needs requires understanding of the population and individuals being served,^{1,2} a challenge in the face of ethnic and religious diversity¹ and inequality.³ Ethnic diversity is posing health-care challenges that many countries are grappling with, and none have resolved. Exchanging insights internationally offers a means of making more rapid progress. The objectives of this paper are to share insights from Scotland's quest for culturally sensitive health systems. This paper, for the first time, aims to succinctly synthesize and appraise 10 years of work in Scotland, by drawing disparate sources together. Cultural sensitivity is 'the ability to recognize, understand and react appropriately to behaviours of persons who belong to a cultural or ethnic group that differs substantially from one's own'⁴ (cultural competence is an alternative phrase for sensitivity). Cultural sensitivity requires an understanding of, and empathy towards, migration as considered below. These points apply to both individuals and health-care systems.

Migration: the need for culturally sensitive health-care systems, a reduction in stigma around immigrants and a broad concept such as ethnicity

The ideas of immigration and immigrants, in contrast to emigration and emigrants, often elicit negative and even hostile emotional reactions.⁵ Europe progressed through emigration, then immigration,⁶ and is now thriving, relative to other continents, notwithstanding the current financial turbulence. Immigration has maintained demographic balance and economic activity in the face of declining fertility rates and an ageing population structure.⁷ Similar dynamics apply in North America and Australasia. Lifting the stigma associated with migration and immigrants, and replacing it with pride, is a top priority to tackle discrimination. This is not easy but it requires that the successes and contributions of immigrants are publicized and appreciated.

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In developing culturally-sensitive (or competent) health-care systems, where many factors need to be considered simultaneously, the broad, fluid and adaptable concept of ethnicity is helpful. Ethnicity is the social group you belong to, or are perceived to belong to, because of your culture (language, diet, religion), ancestry and physical features.¹ By permitting voluntary, self-assignment of ethnic group by the individual (or parent as appropriate), the process of ethnic categorization is not disempowering as it respects both autonomy and self-identity. Each country will need to develop a set of ethnic group categories that are both acceptable to the public and provide meaningful data. The process and outcome is briefly considered in the next section. We should also collect directly, where possible and according to needs, data on specific facets of ethnicity, e.g. birthplace, acculturation, language preferences, culture, religion, etc.

The use of the concept and associated terminology of ethnicity is resisted across much of Europe, with preference for nationality, migrant status or country of birth.⁸ These alternative categories emphasize immigrant status. The offspring of migrants are not migrants but are often called so. The inappropriate use of the migrant identity and label is likely to restrain opportunities for these offspring because of antipathy to migrants. In North America race has been preferred to ethnicity but ethnicity has superseded race in the biomedical literature, as reflected in the bibliographic database Medline, in the USA and Europe alike, because of its increasing salience.⁹ (The replacement of race by ethnicity was recommended by Huxley *et al* in 1935.⁶) In practice, the concept of race, emphasizing physical differences, is being subsumed within ethnicity.

Scotland's migration history and ethnic composition

Like many European countries Scotland has been forged by migration, especially emigration, though as in much of Europe emigration has declined in relation to immigration.⁶ Between 1850 and 1950 Irish, Lithuanians, Italians and Poles immigrated. Mostly these populations have settled well, despite clear evidence of historical prejudice. Between 1950 and 2000 Indians, Pakistanis, Bangladeshis and Chinese immigrated in significant numbers, again, settling well with major contributions to health care, commerce and culture. Recently, asylum seekers, refugees, Eastern Europeans (an estimated 60 000) and an increasing number of students immigrated.

While the legal basis for collecting ethnicity in the Scottish census was established in 1921 this was first done in 1991, following decades of consultation and research.

The census ethnicity question was developed following careful research, both qualitative and quantitative and field testing and consultation. The 1991 question was reshaped and enhanced in 2001, and again in 2011 (statistical results awaited). The 2001 question had 5 broad categories and 14 sub-categories that the respondent selected from in response to the question 'What is your ethnicity group?' For example, under the broad category White, there are options for Scottish, Other British, Irish and Any Other White background (write in option). The label White is widely acceptable in the UK as an ethnic group, rather than race, category. It is a label for the settled European origin people of the UK not merely for skin colour. The 2001 Census showed that populations that did not place themselves in the White category (at 2%) doubled since 1991 (1%) and this may happen again in 2011 (expected 4%). While the non-White population is small compared with some European nations (e.g. France, Germany) this history is not untypical in Europe. Scotland is home to large numbers of people who identify as non-Scottish White, e.g. White Irish.

Ethnic health inequalities and the use of inequity to set priorities

Many forces that impact on health are distributed unequally across ethnic groups, hence ethnic health inequalities are common¹ (for a fuller discussion on these forces, see pp. 150–181 in ref. 1). Differences in the distribution of these forces can be huge, e.g. 30-fold variations are demonstrable in the prevalence of current smoking and current alcohol consumption,¹⁰ and are also large for many other causal factors and outcomes.¹

With so many inequalities we need a means for prioritization. The concept that works well is inequity. An inequity is an inequality (difference) that involves unfairness. The smoking cessation services, for example, are designed for the population as a whole, and that means they are more suitable for Scottish White, Other White British and White Irish people than for other ethnic minority groups who require a more tailored service.¹¹ Inequality in smoking prevalence (lower in Indian and Chinese¹⁰), therefore, is not a health systems inequity. In contrast, the 6–7 years lower life expectancy of African Americans compared with White Americans has been noted for more than a century.¹² The causes include economic disadvantage, discrimination and poorer access to health care so this inequality is a social and health systems inequity. Of the many inequalities those that are inequitable deserve most attention by health systems.

Multiplicity of challenges for a culturally-sensitive health-care system: achievement benefits all populations

The challenges of health care for multi-ethnic societies are complex (Box 1), and have been recognized by the World Health Organization (WHO) for several decades.¹³ The changes needed are usually around modification of existing policies and services.² In the process of making changes, there are benefits for all populations. For example, in hospitals in Scotland, Christian-type chapels have been replaced by multi-faith spaces, suitable for worship and contemplation for all, which meet everyone's needs including Scottish White people who are not practising a specific religion. Other examples include international cuisine (preferred by many patients) and signage using symbols rather than only words in hospitals which help everyone, not just the specific populations the changes were made for.

Box 1 Some challenges for culturally sensitive health systems.

Variations in health behaviours, beliefs and attitudes, and diseases.
 Diagnosis, treatment, intervention, adherence to the intervention and outcomes varying.
 Language and cultural barriers.
 Requirements based on religion.
 Lack of information and research.
 Lack of leadership.
 Personal biases, stereotyped views and individual racism.
 Institutional (health system) bias and laws against it.
 Laws requiring equal opportunities in employment and other walks of public life.

Legal framework, policy consensus and major recent achievements in Scotland

Law and policy: an essential foundation

The European Union states are governed by the same legal and ethical principles, e.g. the 1997 Treaty of Amsterdam, Article 13, gives powers to combat discrimination on sex, racial or ethnic origin, religion or belief, etc. The UK has laws including the Race Relations Amendment Act 2000 implemented in 2002 (building on the 1976 act).¹⁴ The UK is now implementing a new 2010 Equality Act. The 2000 act includes a duty to demonstrably promote equality by publishing both plans and progress. How has Scotland responded?

Lorent and Bhopal compared progress in Belgium and Scotland and summarized the outcome as football odds (4:1 in favour of Scotland).¹⁵ Following a 2-year consultation and 'stocktake', Scotland published its policy on ethnicity and health¹⁶ disseminated as a Health Department Letter (HDL). The policy was called 'Fair for All', a choice that has stood the test of time, and it focused on the five issues in Box 2a. The HDL established a National Resource Centre for Ethnic Minority Health (NRCEMH), which functioned between 2002 and 2008 on short-term funding. (For achievements see <http://www.healthscotland.com/about/equalities/guidanceandresourcesFFA/raceresources.aspx>, accessed 11th of August 2010.) Between 2002 and 2008 the Scottish Government promoted similar policies in other equality areas ('strands'), e.g. disability, sexual orientation, gender, etc. Integration of six such strands, including ethnicity, was achieved by the creation of the Planning and Equalities Directorate in NHS Health Scotland in 2008, now the Equality, People and Performance Directorate (<http://www.healthscotland.com/equalities/>, accessed 12 August 2010). In incorporating the NRCEMH's goals the new arrangements have integrated these into the mainstream of the NHS with secure, long-term funding, a vital shelter given current financial cutbacks and the UK's history of stop-go ethnicity and health projects.

Box 2

(a) The five key issues in Scotland's Ethnicity and Health (Fair for All) Policy

- Energizing the organization, leadership.
- Demographics, understanding the populations under consideration.
- Access and service delivery, taking steps to modify existing services to meet needs of Ethnic minority groups.
- Human resources, equality in employment
- Community development, strengthening communities.

(b) The six top priorities in Scotland's ethnicity and health research strategy

- Ethnic coding of routine, existing health information systems with a target of >80% valid coding by 2013.
- Data linkage work to be developed and sustained.
- An ethnically boosted health survey to describe social/economic circumstances, risk factor patterns and prevalence of major health problems by ethnic group.
- Coordinated research on major problems.
- Audit of health and social care services to assess whether quality and access standards are met.
- Coordinating and monitoring of research by an implementation group.

Data and research: required to establish health needs and effectiveness of interventions

Collection of ethnicity information has been embedded as a core responsibility in Information Services (ISD) Scotland's health information organization. The major challenge has been improving diversity coding in routine health information systems, an ongoing task with slow improvements. Ethnic coding is based on self-identification using a question similar to the one in the census. The question is posed on registration with a general practitioner and/or attendance at a hospital. Ethnic coding for Scotland in 2009 was about 5–10% for hospital admissions (but exceeded 30% in 2010); 18% for cancer registration data; about 60% in the Scottish Diabetes Register and estimated at 20–30% for primary care (general practice/family medicine) data. These figures are rising as a result of recent interventions and particularly rapidly for hospital admissions. The feasibility and value of retrospective assignment of ethnic group codes was explored, as an interim measure, using computerized linkage of census (containing ethnic group) and health records. The resulting retrospective cohort study of 4.65 million people has provided data on acute MI and will shortly describe cardiovascular, cancer, maternal and child health and mental health outcomes.¹⁷ This cohort is not a substitute for comprehensive, good quality prospective ethnic coding but a necessity in its absence.

Scotland's research on ethnicity and health has been intermittent. Scotland led in identifying and tackling 'Asian rickets' in the 1970s in the City of Glasgow, work that influenced the UK, and further afield.¹⁸ Once the 'Asian rickets' problem was tackled, it was forgotten and since no system-level changes were embedded into the NHS, the problem has recurred both in Scotland and UK wide. This illustrates the problem with the informal approach to implementing research. Research on ethnic inequalities in Scotland has been limited though a recent upsurge is underway.¹⁹ NHS Health Scotland, therefore, led in developing an ethnic health research strategy published in 2009.¹⁹ The strategy sets out the need, reviews the research record and outlines six priorities as given in Box 2b.

Service delivery: institutions and professionals need to work on long term time scales to deliver changes in practice

Service delivery is devolved to local boards that balance priorities within limits of funding and resources allocated by the Scottish Government. One of the 14 such organizations is Lothian NHS Board centred around Edinburgh, with a budget of over £1 billion for about 750 000 people. NHS Lothian Board's first strategic act on ethnicity and health was the development of a Board level action plan for 2003–2008

(Being Fair for All in the NHS in Lothian).²⁰ The 10 priorities responded to challenges in the Fair for All national policy on ethnicity and health. In addition, Lothian NHS Board published a Race Equality Scheme in November 2003, setting out how it was going to meet the requirements of the Race Relations Amendment Act 2000. As recommended by the Fair for All ethnicity and health policy, NHS Lothian Board set up an advisory Ethnic Health Forum (I am a member). Despite occasional setbacks, much progress has been made (see www.nhslothian.scot.nhs.uk/news/documents/equalitydiversity_strategy.pdf, accessed 11th of August 2010). The setbacks included that staff training programmes were not well attended. New approaches are now being explored particularly on-line, at the workplace, and in integration within other training modules. Ethnic coding remains low and a new Ethnic Coding Task Force (which I Chair) was set up in April 2009 specifically to achieve 90% coding by 2012, emulating the 80% already achieved elsewhere in Scotland, i.e. in NHS Lanarkshire Board.

Practical actions to make services more cross-culturally sensitive in NHS Lothian include those in Box 3. The development of link worker services (box 3, bullet point 4) is illustrative of timescales. This started in 1994 with a single member of staff. In 1999 the model was tested in a new project, i.e. the Minority Ethnic Health Inclusion Project Pilot (MEHIP). This was successful and integrated in 2001 into the NHS. In 2006 the Scottish risk factor screening project, Keep Well, utilized MEHIP to help screen ethnic minority populations. In 2008 the staff of the demonstration cardiovascular risk factor screening Khush Dil (meaning Happy Heart) project²¹ were incorporated into MEHIP. In 2009, MEHIP was renamed as MEHIS (Minority Ethnic Health Inclusion Service), the word service recognizing its full integration into the NHS. The evolution took 15 years.

Box 3 Practical actions taken towards culturally sensitive services in NHS Lothian

- Interpreting and translation funded for inpatient and out-patient services (including general practice) free for the patient and the professional.
- Spiritual services in hospital for every religion including creating multi-faith spaces and facilities.
- Food in hospitals offers appropriate choices to meet patients' religious and cultural needs.
- A cadre of trained, link worker staff to support minority patients and communities (e.g. MEHIS).
- Community organizations being supported to provide appropriate services.
- Ideas tested out using specific projects, e.g. impact of a cardiovascular risk control project for South Asians.²¹

The creation of a culturally sensitive service is not time limited. Migration and ethnic diversity is dynamic, continuous and unpredictable. Recent immigration into Scotland from Eastern Europe, particularly Poland, has posed new challenges, e.g. Polish people's medicalized understandings of pregnancy, and childbirth and their participation in the Polish and UK health systems simultaneously, has meant new adaptations by staff and services.

Some obstacles on the culturally sensitive health-care pathway: implementation is tough

The preparation of policy in Scotland required political will and skilled civil service support, being dependent on both strong leadership and consensus building. The biggest challenges, summarized in Box 4, however, have been around getting policy implemented, sustained leadership, ethnic monitoring to provide routine data, inadequate budgets, difficulty in freeing up resources locked into services that are not attuned to the requirements of a multiethnic society and competing priorities. Monitoring progress is important and in Scotland we have a toolkit 'Checking for Change' that accommodates complexity in an approach whereby each organization observes how it moves from basic (level 1) to more advanced (level 4) responses (see <http://www.healthscotland.com/uploads/documents/6292-Checking%20for%20Change%20-%20Executive%20summary.pdf>, accessed 30th of June 2011). Getting this toolkit adopted routinely across Scotland has proven difficult, despite its wide acclaim. One issue that has arisen is that the toolkit focused on ethnicity but increasingly ethnicity is dealt with as one of the several diversity strands. These other strands may have different needs.

Box 4 Some of the challenges in achieving policy

- Implementation
- Insufficient monitoring
- Sparse budgets
- Competing priorities
- Insufficient information
- Mainstreaming projects into routine service
- Maintaining engagement between the statutory and voluntary sectors
- Altering service delivery
- Winning hearts and minds.

Bringing successful demonstration projects into the mainstream of the service is difficult. Mainstream budgets are tight and there are other calls (usually from powerful

established services) for new funding. Intersectoral working is important but keeping the voluntary sector engaged and funded is difficult when NHS funding is reduced. Even when policy, management, budgets and health professionals are aligned, as for interpreting services, delivery is difficult—it takes excellence in systems to achieve a successful and punctual encounter between interpreter, professional and patient.

There is a view, sometimes deemed 'politically incorrect', that it is the responsibility of patients and the public to adapt to the available health services, not the other way around. This view is in opposition to the patient centred, human rights approach of modern services, but it cannot be ignored and needs to be dealt with rationally. This view is clearly coming to the fore as health-care budgets are being cut.

We find, worryingly, that professionals have not heard of/read law or policy. Policy directives, alone, cannot achieve the desired end in quality of patient care which requires professionals' commitment. At other times, a passive decision is taken not to implement policy, e.g. the recommendation of the Scottish Fair For All ethnicity and health policy that an advisory Ethnic Health Forum be established within each of the 14 NHS health boards was rarely achieved.

Conclusions: Scotland's progress in a European and wider international context

Scotland's progress has been comparatively strong in Europe.¹⁵ Progress has been built on partnership by government and institutions promoting equality and justice, and achieved within a strong National Health Service, with underpinning research and external partnership. There were several identifiable catalysts including: a confluence of like minded leaders in academia, NHS public health (Dr Rafik Gardee, first director of the National Resource Centre for Ethnic Minority Health), and Scottish Government Civil Service (Mr Hector Mackenzie); openness in government and management; and the shock wave of the racist murder in London of Stephen Lawrence that led to uncovering institutional racism that was subsequently the focus of the Race Relations Amendment Act 2000. These and other factors spurred both policy action and release of funding to initiate practical actions. The progress in Scotland has drawn on, and contributed to, international work. In the USA despite vast resources and long recognition of the issues, culturally sensitive health care has not yet been achieved, requiring new demonstration projects.²² In some countries of continental Europe, such as the Netherlands, we have seen patchy progress, subject to political change (currently adverse), and

progress has largely been in service delivery, rather than national policy.²³ In New Zealand we have innovative, and effective work in relation to Maoris—political power has been instrumental.²⁴ In multi-ethnic countries in the Middle East, China, India, South America, etc., the issue seems mostly unrecognized.

Creating culturally-sensitive health systems in our modern day multi-ethnic societies is challenging, interesting and shows potential for health-care advances. Sharing experience means faster progress. Countries need policies and plans that set out recommendations, the actions required, the responsible people and organizations to take the actions, time-scales and processes and structures for implementation. The recommendations and actions may need to be prioritized. Scotland's Fair for All policy offers a framework for others to build upon. The WHO has boosted the field with its 2010 global consultation and 2008 World Health Assembly resolution.²⁵ The quest will continue internationally, perhaps globally.

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Conflict of interest

I have been closely involved with much of the work described. There are, however, no other competing interests.

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References

- 1 Bhopal RS *Ethnicity, Race, and Health in Multicultural Societies; Foundations for Better Epidemiology, Public Health, and Health Care*. Oxford: Oxford University Press, 2007.
- 2 Gill PS, Kai J, Bhopal RS *et al.* Health care needs assessment: black and minority ethnic groups. In: Stevens A *et al.* (ed). *Health Care Needs Assessment. The Epidemiologically Based Needs Assessment Reviews*. Third Series edition. Abingdon: Radcliffe Medical Press Ltd, 2007, 227–389.
- 3 Commission of the European Communities. *Solidarity in Health: Reducing Health Inequalities in the EU*. Brussels: Commission of the European Communities, 2009, 1–11.
- 4 Last JM *A Dictionary of Public Health*. Oxford: Oxford University Press Inc, 2007.
- 5 Directorate-General Employment Social Affairs and Equal Opportunities. *Special EUROBAROMETER 263 'Discrimination in the European Union'*. European Commission, 2007, 1–26.
- 6 Huxley JS, Haddon AC, Carr-Sunders AM *We Europeans: A Survey of 'Racial' Problems*. New York: Harper, 1935.
- 7 Coleman D The demographic effects of international migration in Europe. *Oxf Rev Econ Policy* 2008;**24**:453–77.
- 8 Stronks K, Kulu-Glasgow I, Agyemang C The utility of 'country of birth' for the classification of ethnic groups in health research: the Dutch experience. *Ethn Health* 2009;**14**:1–14.
- 9 Afshari R, Bhopal RS Ethnicity has overtaken race in medical science: MEDLINE-based comparison of trends in the USA and the rest of the world, 1965–2005. *Int J Epidemiol* 2010;**39**:1682–3.
- 10 Becker E, Boreham R, Chaudhury M *et al.* *Health Survey for England 2004—The Health of Minority Ethnic Groups*. London: National Centre for Social Research, 2006.
- 11 Begh RA, Aveyard P, Upton P *et al.* Promoting smoking cessation in Bangladeshi and Pakistani male adults: design of a pilot cluster randomised controlled trial of trained community smoking cessation workers. *Trials* 2009;**10**:71–86.
- 12 Sloan FA, Ayyagari P, Salm M *et al.* The longevity gap between black and white men in the United States at the beginning and end of the 20th Century. *Am J Public Health* 2010;**100**:357–63.
- 13 World Health Organization. *Migration and Health*. Netherlands: World Health Organization, 1983.
- 14 The Home Office. *Race Relations (Amendment) Act 2000: New Laws for a Successful Multi-Racial Britain*. London: Home Office Communication Directorate, 2001.
- 15 Lorant V, Bhopal R Comparing policies to tackle ethnic inequalities in health: Belgium 1 Scotland 4. *Eur J Public Health* 2010;doi:10.1093/eurpub/ckq061.
- 16 Scottish Executive. *Fair for All: Working Together Towards Culturally-Competent Services*. Edinburgh: Scottish Executive NHS HDL (2002)51, 2002.
- 17 Bhopal R, Fischbacher C, Povey C *et al.* Cohort profile: Scottish Health and Ethnicity Linkage Study of 4.65 million people exploring ethnic variations in disease in Scotland. *Int J Epidemiol* 2010;10.1093/ije/dyq118.

- 18 Dunnigan MG, McIntosh WB, Sutherland GR *et al.* Policy for prevention of Asian rickets in Britain: a preliminary assessment of the Glasgow Rickets Campaign. *Br Med J* 1981;**288**:357–60.
- 19 The Scottish Ethnicity and Health Research Strategy Working Group. *Health in our Multi-ethnic Scotland Future Research Priorities (full report)*. Edinburgh: NHS Health Scotland, Scottish Government, 2009, 1–84.
- 20 Lothian NHS Minority Health Group. Strategic action plan on minority ethnic health: being fair for all in the NHS in Lothian. Edinburgh: NHS Lothian, 2003, 1–64.
- 21 Mathews G, Alexander J, Rahemtulla T *et al.* Impact of a cardiovascular risk control project for South Asians (Khush Dil) on motivation, behaviour, obesity, blood pressure and lipids. *J Public Health* 2007;**29**:388–97.
- 22 Mostow C, Crosson J, Gordon S *et al.* Treating and precepting with RESPECT: a relational model addressing race, ethnicity, and culture in medical training. *J Gen Intern Med* 2010;**25** (Suppl. 2): S146–S154.
- 23 Manna DR. *Standardisation in a Multi-Ethnic World: a Paradox?*. Rotterdam: Erasmus Universiteit, 2006.
- 24 Tobias M, Blakely T, Matheson D *et al.* Changing trends in indigenous inequalities in mortality: lessons from New Zealand. *Int J Epidemiol* 2009;**38**:1711–22.
- 25 World Health Organisation. *Health of Migrants—The Way Forward: Report of a Global Consultation*, 1st edn. Geneva: WHO, 2010, 1–119.