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Migrant Workers' Health: Scottish Evidence in Perspective

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EXECUTIVE SUMMARY

Scotland is facing similar issues faced by other migrant-receiving countries. Unlike some other countries, Scottish government policy is to encourage immigration because Scotland would benefit from a net inflow of appropriate individuals. UK policies are currently tending toward restricting both immigration and migrants' access to healthcare.

Access to health care services in Scotland is further restricted for migrant workers by the language barrier, by their knowledge of access routes and rights, by problems in getting time off work, and by their own and health professionals' cultural settings and expectations about the provision of health care. Emerging evidence suggests that some Polish migrant workers use healthcare in both the UK and Poland. A lack of support for migrant women suffering domestic abuse was found in Scotland. A number of initiatives have been tried in assessing the extent of migrant health care needs (through both testing interventions and Health Needs Assessment) in Scotland, but appear to have been patchy and short term, with a lack of strategic structure, and there is no national guidance on models of best practice for primary or secondary care. There are legislative and guidance frameworks for equalities issues in general, for example the Race Relations (Amendment) Act,¹ Fair For All,² and recent Health Scotland work on interpreting.³ There remains a need for interpreting and translation services for new migrants, currently evidenced particularly in emergency and maternity care, but in the longer term English as a second language (ESOL) is a better solution to language problems and also removes a barrier to integration.

There is an issue in some parts of Scotland about perceived inappropriate use of accident and emergency departments. This may not reflect actual use. Migrants may understand GP care and be registered with a GP but be dissatisfied with it owing to long waiting times, inconvenient hours and language barriers. Overall, the picture of A&E use by migrant workers in comparison to the home population is variegated.

Emerging evidence suggests that migrant mental health in Scotland appeared more affected by the migration than was physical health. But there was some evidence of self reported deterioration in physical health following migration. Follow up to assess long term effects is difficult. Alcohol and drug misuse, perhaps used to cope with

stress brought about by work conditions, lack of support networks, and problems such as racism encountered by migrants to the UK may make migrants to Scotland more vulnerable to mental health issues. Some mental health issues such as schizophrenia may be brought out more than in their country of origin in vulnerable migrant individuals in high stress western societies, but strains may exist with networks in the country of origin also. Stigma may cause some groups of migrants particularly to underuse mental health services, because some cultures may stigmatise mental health problems more than others. Mental health issues (e.g. depression) in turn may be a barrier to access to physical health services, and linked to physical health problems and violence.

Important physical health issues concerned access to dental care, where the cost was a barrier. A high proportion of migrant workers assessed their physical health (especially respiratory) and psychological wellbeing as less than good. A particular group, the Roma, had a particular issue with TB. Little evidence was found that ill-health among migrants is caused by poor diet in Scotland.

Although culture frames experiences of care in other areas we may be particularly aware of this in maternal health care because there is more research available. Differences in behaviour and expectations were found in migrants as compared to the Scottish population. Sexually transmitted infections (STIs) and fertility control (sic) are sexual health issues for EU migrant workers in Scotland as for the rest of the population. Little work was found on fertility control, but some on STIs in other migrant groups (BME populations) in Scotland, which recommended methods to improve service uptake. The Scottish work focused on female sexual health. Opportunities were missed for sexual health promotion work (e.g. contraceptive choices) in primary care. Migrants were not fully aware of the different roles of primary care and specialist gynaecological care in Scotland.

Provision of mainstream service access for disabled refugees was a recommendation from London work. The prevalence of severe learning disabilities amongst UK South Asian communities may be up to three times higher than the general population. There was some Scottish work found on ethnic elders' carers' use of respite care.

Child health is linked to early years' education and parental health education and this is important in facilitating early integration. Three of four recognised categories of

child health problems were found in Glasgow migrant children, where there was also quite low awareness of childcare services. In some migrant groups and in some members but not others, health issues are transmitted down generations. Reasons are not well evidenced. Little Scottish work was found on intergenerational transmission of migrant health problems.

Past approaches to migrant health have focused mainly on the risk of infectious diseases entering the country. TB and HIV are still risks, and compulsory routine screening for non EU migrants still takes place at airports of entry to the UK but is patchy, has been shown to be ineffective, and in any case it is not clear how widely this is implemented in Scottish airports. Other solutions are suggested from the evidence, e.g. a welcome health check and effective community-based services. There is little Scottish evidence about infectious disease rates in migrant sex workers or seafarers, or any health protection measures they use. Community-based screening for migrant workers could be arranged through employers or primary care or both. An initiative in primary care has been undertaken in the Borders. Evidence is lacking about the prevalence of TB and HIV in migrant populations in Scotland.

Interventions need to be evidence-based or there is a risk they may make migrants' health worse by disempowering them. Migrant health educators and health promoters from migrant communities can deliver interventions, were found successful outside Scotland. Empowering women was recommended to improve community health (in the US). Language training, screening new migrants in primary care, information initiatives and language systems in place at point of care delivery have been found useful in Scotland.

Although there is little evidence that setting up a separate migrant health service would be acceptable or effective, co-ordination activity to improve the response of mainstream services to migrant health needs is an intervention that has received some interest in public health networks in England. Initiatives to improve the cultural sensitivity of health professionals are supported by evidence. Models of service delivery to new migrants still need to be explored.

There is a need to help migrant workers integrate better. Relevant evidence on barriers to integration and gaps in evidence on integration is confirmed in a study by COMPAS. A useful source of evidence here could be longitudinal studies.

Although there is evidence that some form of health and safety training is given to migrant workers in Scotland, there is little evidence of co-ordinated community-based approaches to workplace health promotion such as seen with farm workers in the US. Community stresses can result from perceived displacement of local people from employments taken up by migrant workers, but there is little current evidence of this from Scotland. Accommodation can bring health issues for migrants related to safety and which may be underreported in Scotland. The cost of registering under the workers' registration scheme may be a greater disincentive to registration for poorer migrants.

Research approaches to add to evidence about changes in migrants' health may be qualitative or quantitative, but ideally the two methods would be integrated and work together. Scottish studies that have attempted this to date have been on a local basis only. There is scope for setting a national framework for quantitative studies on migrant health, with clear connections to local qualitative studies.

Cultural capacity needs to be incorporated into Scottish health services in order to treat and care for people from other cultures more effectively. There are some signs of a start made on this in Scotland. Health measurement instruments as well as professionals' concepts may need adaptation and expansion.

Migrants can suffer more from long term conditions than settled populations. The reasons are not well evidenced, but may be multi-causal, including less access to care, less understanding of their illness (as contrasted to disease) from host country health professionals, greater adaptive stress and greater deprivation (although the deprivation hypothesis has been challenged).

The gaps and inadequacies of routine information systems about migrants in Scotland and the UK make it difficult to do effective research on migrant health. A particular problem in this regard is the low level of registration with general practices, which would be useful if ethnicity/country of origin were adequately captured in systems for registration. A central NHS data repository for England and Wales is in existence, which would have details of any registrations.

It is concluded that migrant workers' health problems are diverse. Comprehensive but voluntary health screening and early information provision for migrant workers can be beneficial through community health structures and employers. Migrant health

promoters and strategic co-ordination for increasing migrant capacity may be useful. A combination of a national information framework and local studies may facilitate the better tracking of migrant health needs by age and sex, to support increased migrant capacity for mainstream health services.

BACKGROUND

A recent bulletin from WHO states:

“Climate change, global conflict and economic necessity are driving the highest levels of migration in history. According to the International Organization for Migration (IOM) some 192 million people are living outside their place of birth, representing about 3% of the world's population.

The sheer scale of human displacement has turned migrant health into a priority global public-health issue, an issue rendered more complex by the diversity of the populations involved - from people in search of work or education to more vulnerable groups like asylum seekers and refugees.

Apart from the increased potential for the spread of infectious disease that a more mobile global population brings, there is also rising concern that migrants' health needs are not always adequately met.”⁴

Scottish Directors of Public Health expressed their concern to the Scottish Public Health Network that they needed guidance on what to do to protect and improve public health in the context of increasing A8 and A2 in-migrant workers in Scotland. In later discussions it was agreed to embed the Scottish review work on migrants in a more general perspective, to see what could be learned from past approaches in the UK and from approaches in other countries. The focus is therefore clearly on the new European migrants to Scotland, but adds a wider perspective. This review was a first step in describing the themes from the evidence about migrant workers and health, focusing on Scottish grey literature, but adding a wider geographical and historical context to help the Directors of Public Health in this task. There was a concern that something needed to be done, but there was necessarily no clarity on what that might be. Hence the research questions (see aims) were broad.

Since this review was commenced a review by Rolfe and Metcalfe with a wider remit to cover all the evidence on recent migration into Scotland has been published by

Scottish Social Research.⁵ The evidence on health aspects included in that work under the heading of social impacts has been consulted for this review.

Rolfe and Metcalfe suggest:

“There is little evidence of any increased demand on health services as a result of increased migration into Scotland. This is explained with reference to characteristics of the migrant population and their reported use of health services in their home countries.”^{5:7}

They agree that there is an evidence gap about migrant health needs in Scotland,^{5:41} and reasons for low take up of services, so the current review will aim to contribute to thinking about how to fill that gap.

Migrant workers

There are a number of definitions of migrant workers, but the United Nations one appears to have widest acceptance:

“The term "migrant worker" refers to a person who is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national.”
(The United Nations Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families)

This Convention has been ratified by Mexico, Brazil and the Philippines (amongst many other nations that supply foreign labour) but it has not been ratified by the United States, Germany and Japan (amongst other nations that depend on cheap foreign labour).⁶

This definition includes anyone who is a working foreign national notwithstanding the time since they arrived.

Another definition from the Working Lives Research Institute is

“Those who have come to the UK within the last five years specifically to find or take up work, whether intending to remain permanently or temporarily and whether documented or undocumented.”⁷

For the purpose of this review the wider definition from the UN is used. However, the brief for the review clearly asked for the inclusion of second generation migrants.

Migrant workers have descendants, whose health may differ systematically from that of the whole population. Some of these are born in the host country, some before their parents entered, and would not be included in the UN definition. They are second (and later) generation migrants. To ignore them in relation to migrant health would be a form of chronological silo thinking, a kind of tunnel vision. Papers on ethnic groups resulted directly from the search strategy, which indicated there was a genuine overlap between ethnic and migrant health. Helman, in the latest edition of his classic work, comments that for migrants:

“living in the cities of the developed world, often in deprived neighbourhoods, their health risks may resemble those of longstanding ethnic minorities in those countries.”^{8:319}

On the other hand to systematically review ethnic health in general was not an aim for this work. Therefore a fine balance needed to be struck. That was achieved by including references from the literature search to represent major themes, and adding further depth at the peer review stage, when the draft report was commented on by external experts in the equalities, and migrant and ethnic health fields. Many people have a migrant descent, it could promote divisions between migrant and host communities to make too black and white a distinction between them, there are clearly shades of grey here.

Under the UN definition a proportion of migrant workers will have passed through an asylum seeking or refugee stage, and so the health needs arising from this experience cannot be ignored in a review of migrant workers' health. Therefore although this is not a review of asylum seekers and refugees health needs, and they are not included in the definition of migrant worker, the review seeks to point up potential issues for those who will become migrant workers, and to put migrant worker issues in that context to facilitate any opportunities that may arise for cross fertilisation of ideas between the two fields. Asylum seekers and refugees may be regarded as extreme cases of 'push' migration (see below), but the push and pull concepts are not either/or and there may be a grey area holding less voluntary migrant workers for whom refugee issues may have particular relevance, with Roma migrants being a case in point.

Given the qualitative approach to analysis, the rigid definitions important for clarity in natural science can be counterproductive when the subject matter includes social reality, where multiple perspectives need to be included.

AIMS

The aims of this review are to:

- Explore and describe recent Scottish work on the health issues raised by increasing European in-migrant workers, and
- interpret these in relation to a wider context of international research findings assessing health needs for international migrant workers

The review is both evidence-based and a more traditional narrative review with an interpretive dimension allowing comment on connections within and applications of the evidence.

Rolfe and Metcalfe see migrant health issues as two fold:

“first, the effect of migration on levels of demand for health services; and secondly, any public health impacts arising from migration, for example different health behaviours such as alcohol consumption.”^{5:38}

They add epidemiological studies of minority groups to this. Public health impacts can be unpacked for the current review into

- the health needs of the migrants themselves (including accessing services) and
- health protection issues for the host population.

Screening comes under each of these. The review does not set out to cover refugees and asylum seekers, though general features of these experiences are discussed for their relevance to their health as migrant workers. It is unique to the migrant worker population as contrasted to the home population that a proportion of them will have been asylum seekers or refugees. Therefore it is essential to include reference to the health issues arising from this experience, which will inform health-related behaviour, relationships with health professionals, and health status for a proportion of migrant workers in a way not seen in non-migrants.

METHOD FOR REVIEW

A narrative review approach was used. This involved firstly a trawl of Scottish health boards for recent work ('grey literature') around migrant health. This was taken to represent current activity around migrant health in Scottish Health Boards. Secondly a literature search focusing on Scottish work was carried out. This included some work from Europe (identified through ASSIA) and some from America (identified through CINAHL) in addition to Scotland. The search included studies addressing health status, health behaviours, and service access and use.

The results of the literature search were further selected on an informal basis by the researcher to focus on papers of relevance to the Scottish migrant health issues identified from the Scottish grey literature. Additional themes with applicability to the Scottish context also emerged from the results of the literature search. These papers were supplemented by reviews identified at a peer review stage, as a way of reducing selection bias. Peer reviewers were selected from attendees of a migrant health day held in March 2009 by the Scottish Public Health Network, at which the early stages of this literature review were reported. Other peer reviewers were asked to comment from the equalities directorate of Health Scotland.

The focus was on UK and European studies, but some American nursing and allied work was included for its attention to the implementation of solutions. About 370 references resulted, mainly based on the migrant worker groups, health problems, service issues or migrant worker occupations. Not all of the database results were examined in depth, it was important in this review to discover in a more qualitative sense the main types of study carried out, the range of topics covered, and the broad categories of results found by the different types of study. The themes identified from the Scottish grey literature were further investigated in a very limited sample of full papers from the literature review. Thus the final themes reported below utilised, but were not constrained by, those found in the Scottish grey literature. Themes on student health and undocumented children and seafarers were not deemed relevant at peer review and were dropped.

An overview of the search strategy is given in the appendix, and detailed search terms are included. The searches were carried out from February 26th to March 5th 2009 (see appendix for search strategies).

The aims, methods and results for each Scottish health board project are summarised for convenience in Appendix 4. Gaps were identified in the Scottish health board service initiatives, as identified from the research, and recommendations for further Scottish needs assessment and service evaluation work were made.

Health issues were the core focus, but as it became apparent that migrant workers health issues cut across many public services, in a spirit of joined up partnership working the wider perspectives on migrant working were taken into account where appropriate. A specific analysis of health problems in relation to employment patterns was not attempted, although employment issues are mentioned all the way through the report where they arose.

Structure of the report

Within each theme, Scottish work and the wider context from other countries and also from a broader frame of evidence from studies of Black and Minority Ethnic groups are discussed separately. Potential learning for Scotland from comparisons and contrasts between these bodies of evidence is highlighted.

THEMES FROM THE REVIEW

The position of migrant workers

While the world population is growing, the Scottish population is predicted to decline and the UK population is aging. In Scotland, inward migration is seen as a solution to issues around bolstering tax revenues and staffing essential services.⁹ The UK government, on the other hand, is currently restricting inward migration. According to U.N. High Commissioner for Human Rights Navi Pillay, migrant workers remain most likely to lose their jobs and to lose access to social services and benefits, so becoming more likely to seek work without authorisation.¹⁰ As a Finnish paper states, lack of knowledge about healthcare rights affects access – many immigrants [especially undocumented] are not aware of their rights; it follows that people who do not know their rights are likely to demand less.¹¹

Some of the migrants who lose their jobs will become illegal or more correctly 'undocumented' or 'informal' migrants. The global recession and climate change are two forces driving overstaying and illegal entry respectively. There is recent interest in London in offering an amnesty to all informal migrants, as demonstrated by a paper from the LSE looking at the cost of regularising these irregular migrants.¹² Costs to the NHS are to be taken into account. Undocumented migrants are a special group who cannot be ignored in Public Health. The US is estimated to have 9.3m undocumented migrants¹³ and there has been interest in determining the size in the UK.¹⁴ Methods of estimating the number of irregular immigrants in 15 countries were reviewed for the Home Office. The study concluded approaches from the US might work in the UK, but all others were either inappropriate or inaccurate.¹⁴ The US provides some examples of a so called 'residual' method. A good example (from the Home Office report cited) is:

“The US Census Bureau, [which] used a residual method to calculate the foreign-born population. The method compared the census *enumerated* foreign-born with the *expected* foreign-born using administrative [Immigration and Naturalization Service (INS)] data to assess the completeness of coverage of the census. In doing so, they were able to calculate the unauthorised component of the foreign-born population. The calculation used

figures for legal immigrants, temporary migrants, and an implied number of unauthorised migrants (Deardorff, 2001).

$$\text{Foreign-born population} = [L - (M+E)] + T + R$$

L = Legal immigrants

M = Mortality to legal immigrants

E = Emigration of legal immigrants

T = Temporary (legal) migrants

R = Residual foreign-born (unauthorised migrants)”

Undocumented migrants are now estimated to number around 725,000 in the UK,¹⁵ but there are no estimates for Scotland.

Undocumented workers have historically:

“had access to health services in the UK, without checks on their immigration status, and the idea of such checks goes against national policies to improve access to health services among ethnic minority communities and promote equality of treatment¹⁶.”¹⁷

Up to 2007, in the EU, undocumented migrants had access to health care, but the undocumented worker transitions UK report¹⁷ states:

“However, this situation is changing, and the government is putting greater emphasis on denying access to services for those that it considers are not in the UK legitimately.¹⁸ It is currently reviewing access to the NHS by foreign nationals, due to be completed by October 2007. The introduction of compulsory identity cards for foreign nationals (see 2.1) forms part of this clampdown.”

A mapping exercise by the Public Health Observatory in the North East of England identified lack of knowledge about EU migrant’s health, though primary care trusts had some knowledge of refugee and asylum seeker health problems from a previous study. These health problems included:

- ‘Mental Health issues, including post traumatic stress disorder, the consequences of trauma and rape, and isolation. Almost all responders mentioned these issues.

- Sexual Health issues, including Sexually Transmitted Infections, HIV and unwanted pregnancies. At least one specialised practice, Arrival, make condoms available.
- Lack of, or incomplete, screening and immunisations – covering a wide variety of checks from communicable disease, cervical smears, breast screening, hearing, eye checks.
- Dental Health – poor dental health and accessing dental care was an issue noted directly in at least four responses. It is a known problem for other migrants as well as asylum seekers.
- Poor nutrition and consequences such as vitamin deficiencies.
- Skin diseases and parasitic diseases.
- Musculoskeletal problems, particularly of the feet – sometimes from travelling.
- Behavioural health problems – opium use, domestic violence, alcohol use, tobacco and smoking.
- Hypertension, H. pylori and diabetes.¹⁹

As Wright et al presage in their report, UK identity cards are now in process of introduction for foreign nationals,²⁰ and these may be used to restrict the right to healthcare, especially of course for those undocumented migrants who cannot prove their identity. A joint review proposing restrictions on undocumented migrants access to GPs was due to report in 2007, but is still delayed after disagreements between the UK Government departments of Health and the Home Office.^{21;22} Legal A8 migrants are currently entitled to the same healthcare as the rest of the population in the UK. Northern Ireland published a guide to migrants rights in 2006 that made that clear, though stating there are small variations across the different countries of the UK.^{23;41} At a recent conference on undocumented migrants, concern was expressed that public sector workers are being asked to become immigration officers.²⁴ Undocumented workers are more at risk of forced labour, including trafficking for sexual exploitation.^{17;28} The potential for increased transmission of STIs is clear.

Scottish Studies

In Scotland, a Fife Council study of 904 migrant workers found 13% of migrant workers did not have a National Insurance Number (NINo).²⁵ Having a NINo is not

compulsory for getting a job in the UK, but the NINo should be allocated when a person has a job so that they can gain entitlements.

Gruer et al point out that tracking migrant workers in Scotland accurately is currently not possible, but state that based on NINo data, '40,000 entered Scotland in 2006-07, of whom over 23,000 were from Poland.'²⁶ This work calls for better ethnic coding in routine data, but does not specifically mention migrant status, country of origin and date of arrival. Gruer et al also propose better data linkage between Census and NHS health records, citing screening and primary care. They also suggest an ethnically boosted health survey, which could be applied to larger migrant groups, a co-ordinated health research strategy for Scotland involving international links. In Scotland, this would involve the Scottish Health Survey and a Scottish component for the UK Longitudinal Household Survey. Gruer et al finally recommend regular audit of ethnic health by health boards (including specifically migrants) to monitor the changing mix of services for ethnic minorities, access and service use problems. For Gruer, maternal and child health care and mental health problems are key priorities here. A comment here would be that the international element recommended by Gruer et al²⁶ could be helpful in comparison studies of migrants with home communities. Migrant studies are a fruitful area for epidemiology through the comparison of groups at home and abroad.²⁷

A recent report covering the Tayside area in Scotland²⁸ investigated a comprehensive range of data sources as part of the IMPS (Improvement to Migration and Population Statistics) initiative from GROS (General Register Office for Scotland). It showed a consistent increase in net in-migration numbers from 2000 to 2007. Europe was an increasingly important area of origin, since 2004. National insurance registrations showed the same numerical pattern. NHS registrations were not broken down by country of origin, 'other white' pupils increased likewise as a proportion of minority ethnic pupils (although the number of minority ethnic pupils decreased markedly between 2003 and 2007), and births to European mothers increased in absolute terms and as a proportion of births to non-UK born mothers. After Gaelic, Polish was the main home language other than English of pupils in two of the three Tayside towns.

Another local demographic estimate from Grampian using a variety of sources indicate that in Grampian local ethnic communities numbered 71,308, or 12.4% of the population in September 2008. New migrant workers and their families in Grampian

were running at 1,200 per month from May 2006, but there is reported to be a drop to 800 per month from July 2008. These estimates draw on local National Insurance Number (NINo) data from the local job centre, usage of local interpretation services, and use of health education and other public services.^{29:15:App2}

Generally, migrant workers in Scotland are young people away from home,^{30:19;31:18} affected by alcohol, tobacco, diet, motoring law, social mores, and accommodation issues. They experience stress both in the domestic situation and at work, as they may be overqualified or have unrelated qualifications for their job.^{32:33:17} In a study of migrant workers in Fife, over half had either a university degree or an undergraduate qualification., and over 70% did not make use of the qualifications or skills in their current job,²⁵ also see de Lima's study in Highland.^{34:50} Some workers are joined by their families, which prompts a reappraisal of their employment and accommodation situation. For example they may seek employment that better reflects their educational level, after taking unskilled jobs in order to enter the UK.³⁵

There is some evidence that the health of migrant workers is generally good, though mental health is a particular problem and their health deteriorates after migration, say Rolfe et al:

“as a result of unfavourable socioeconomic and environmental circumstances, including poverty, poor living conditions and social isolation^{36:3}.”^{5:40}

A report on migrant workers in the Highlands and Islands³⁴ identifies mobility, demography, momentum and wage differential as the factors driving migration.

Scotland is facing similar issues faced by other migrant-receiving countries, but unlike some others would benefit from a net inflow of appropriate individuals. There are data problems in monitoring migrant flows and in ensuring migrant workers receive health care they need. Migrant workers health can deteriorate after their migration takes place. Migrant workers, especially if undocumented have greater healthcare risks than the host population, yet UK policies are tending toward restricting their access to healthcare.

Learning from previous waves of immigration – with special reference to infectious disease

As the history of some past approaches to migrant health implies, in the past the biological level was the only issue especially for example in port health.³⁷⁻⁴⁰ From the 1940's and 50's though there has been a move, consonant with the reduction in infectious disease generally, to focus prevention of ill-health work on 'upstream' causes at societal level, as the necessity for curing disease at the individual biological level has diminished.

Changing approaches to protecting both the public and migrants themselves from infectious diseases are exemplified in their past and present profile in the pages of 'Public Health'. In the last decade of 19th century, the 'Public Health' journal was concerned with migrant health focusing on ports, and the aim was to prevent foreign infectious diseases from entering the country through quarantine regulations. There were in 1893 no quarantine regulations for cholera, and the local Sanitary Committee in Hull was pressing for their introduction.^{41;42} There was some disagreement about the necessity for quarantine regulations as implemented by a number of different parties for cholera in Hull. Arguments were made by the Medical Officer of Health (MOH) there in favour of medical inspection and medical detention and reliance on port sanitation.⁴³, and arguments were made more generally for this^{44;45} and for the status quo too.⁴⁶

There was also concern that 'vagrants' (sic) were spreading smallpox in the epidemic of that disease in England in the early 1890's. A survey of medical officers of health carried out by Henry Armstrong reported their view that the disease had been introduced into their towns by vagrants from over 58% of the MOH's surveyed.⁴⁷ An early attempt to count the migrant population in London, Liverpool, Leeds, Hull and Manchester is reported in volume 2 of 'Public Health' (1889-1890). There was a large Polish group in London then. The health of Russian and Polish Jews was described as not bad, but they lived in unsanitary houses.⁴⁸

By the post second world war period port health occupies fewer pages in 'Public Health'. The MOH for the Welsh port of Barry delivered a rather nostalgic address about the history of port health which was printed in the journal in 1959.⁴⁹ The concern about TB continued through the 20th century and is still with us. In 1962 an

editorial in the Lancet, reported the BMA's suggestion that immigrants be x-rayed on entry and if found to have TB and refusing treatment be deported.⁵⁰ In 1964, Springett, finding high rates of TB resistance in immigrants in Birmingham, also suggested screening immigrants on entry.⁵¹

"The only satisfactory method of control is that based on chest radiography at or before entry to this country-a method which has been successfully practised by many countries of the world, including parts of the Commonwealth, sometimes to the detriment of the intending emigrant from Britain."⁵¹

It was realised later that there were no powers to screen their dependents, making screening ineffectual.⁵² The debate continued nevertheless, in 1966 a high proportion of immigrant children in Bradford were TB resistant, showing they had been in contact with TB.

"Of 1,394 children examined, 788 (56.5 per cent.) were found to be tuberculin-positive, and have been X-rayed. Seven cases of active pulmonary tuberculosis were found, all in children from Pakistan. The 606 (43.5 per cent.) children who were tuberculin-negative were given B.C.G. vaccine."⁵³

TB continues to feature in the pages of 'Public Health', incidence is rising again.⁵⁴ Medical powers continue to be uncertain, since the legal powers of medical doctors to detain people with tuberculosis have been called into question by the human rights act 1998⁵⁵ and continue to be an issue. For example in Ireland, a self administered postal questionnaire survey found: "Physicians detaining, or threatening to detain, patients continue to expose themselves to legal liability because of the outdated legal framework underlying those powers."⁵⁶ Most of the recent trends in TB in England are considered explained by migration.⁵⁴ Increasing infectious disease rates are still attributed to immigration.⁵⁷ Canada screens migrants for infectious disease:

"Rates per 100,000 applicants were: refugees 286, refugee claimants 267, family class 187, temporary residents 85, and economic class 63."⁵⁸

There are still calls for more screening on entry to the UK, and this has been provided by the International Organization for Migration (IOM).⁵⁹ Although "migration explains most of the recent trends in tuberculosis in England"⁵⁴ a still referenced report from 2003 stated compulsory port and airport screening for TB and HIV was

ineffective.⁶⁰ TB screening is currently in operation at the airports of entry to the UK for non-EU migrants but is patchy and has been criticised for missing active cases, which may not be caught by X-rays, and may be hidden by HIV infection according to a recent newspaper report.⁶¹

The UK Border Agency is implementing compulsory TB screening in country of origin at the entry clearance stage for migrants over 11 years old from countries with high TB prevalence as defined by WHO. Under a five year strategy published in 2005, this has started for people intending to stay over 6 months. An initial chest X-ray is followed by further tests if there are signs of TB infection. If a person has infectious TB their entry visa will normally be refused.⁶²

Malaria is another infectious disease that can be imported into the UK, though not infectious in the UK itself unless climate change brings carrier mosquitoes. It currently therefore affects mainly migrants and travellers themselves.⁶³ Cases occur in Scotland.⁶⁴

Scottish Studies

A classification of waves of immigration to Scotland now current is that of Gruer, who recently saw Scotland's ethnic composition as shaped by migration, but mass emigration overshadows immigration.⁶⁵

- **1850-1950** Irish, Lithuanians, Jews, Italians, Poles
- **1950-2000** Indians, Pakistanis, Bangladeshis, Chinese
- **2001-present** Asylum seekers, refugees, Eastern Europeans

Not a great deal of other Scottish work from the distant past was found on immigration, perhaps reflecting the comment above.

What we can learn from this for the present day, when the majority of concern is for the health of migrants themselves, is that compulsory health screening may be problematic, (and does not apply at all to EU in-migrants).

Past approaches to migrant health have focused mainly on the risk of infectious diseases entering the country. TB and HIV are still risks, and compulsory routine screening for non EU migrants still takes place at airports of entry to the UK but is patchy, has been shown to be ineffective, and it is not clear how widely this is implemented in Scottish airports. Other solutions are suggested from the evidence, e.g. a welcome health check and effective community-based services.

Screening

Community-based and workplace screening may be additional or alternative to point of entry screening. Screening can be compulsory or voluntary, is not limited to point of country entry, and can be for infectious diseases only or a more comprehensive health check. Hence it is covered as a separate topic here, though material about infectious disease screening included in the previous section on public health approaches to past waves of immigration will not be repeated.

As a comment, workplace screening specifically of migrants could foster stigma and so verge on the unethical. It would be pragmatically difficult to identify and target most workplaces with migrants. Hargreaves cites criticism of TB screening of new migrants at UK airports, on the grounds that resources could be used more effectively by improving community-based tuberculosis screening programmes that encompass a wider range of health-care issues.⁴ There are continued calls for better infectious disease surveillance, for example for Tuberculosis in the US, in the context of the rise of disease resistant TB.⁶⁶ Screening sex workers for HIV also figures here.

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In a Grampian study only 2 of 25 migrants interviewed about health reported being screened for infectious disease (one at the airport and another through work).⁶⁷ Six had completed medical assessment forms and undergone a physical examination because they were working with food. The generalisability of this is limited, the authors comment:

“Sampling was opportunistic and involved 'snowballing' where initial contact led to other contacts. Despite some challenges in accessing migrant workers, the sample achieved reflects the trends documented in Scotland and across the UK with regard to nationalities that are dominant and to age, gender, sectors of employment and job roles.”(p18)

A Borders region Scottish study recommended meeting need for comprehensive health screening of new migrants through the new GP contract to provide incentives in those parts of the Borders where it is known that there are significant numbers of migrant workers.⁶⁸ For child health, and adults too, offer of screening to ensure immunisation would be important, to ensure equality with the UK population. The study added a recommendation on the provision of information for GPs and primary health care teams on the health of people from non-UK countries and appropriate screening arrangements.⁶⁸

Health Protection Scotland notes that no assessment has been made of the health of the Scottish migrant population. "Surveillance data for TB and HIV has found these infections within the migrant populations of Scotland, although the risk of transfer of infections between migrants and the wider population has not been assessed."^{5:40}

Comprehensive health screening could include the important migrant health issues of mental health and wellbeing. Since health can deteriorate after arrival, timing is an issue.

Community-based screening for migrant workers could be arranged through employers or primary care or both. An initiative in primary care has been undertaken in the Borders. Evidence is lacking about risks posed by TB and HIV in migrant populations in Scotland.

Access and service use

Undocumented migrants (9.3m) and other health care uninsured individuals (47m) in the US exemplify the impact of this group's lack of rights to health care in their use of emergency services. The problem may soon apply in the UK also, since here as well undocumented migrants' rights to use any health service other than emergency care are under review.²¹ Clarke advances the third world concept of the health promoter as a cost effective answer to emergency service overload for the first world, for delivering health care and ensuring public health measures. The health promoter is a respected member of the immigrant community and has a role filling the gap between medical services and his community, for example making individual visits to their

homes, training clinical staff on cultural sensitivity, and encouraging compliance with medication.¹³ There appears no direct equivalent to the migrant health promoter in Scotland. There is though some overlap between these functions and those of Linkworker/Advocates who do exist in Scotland. Lothian's Minority Ethnic Health Inclusion Project, for example, employs Linkworker/Advocates who visit individuals and train staff in cultural sensitivity (personal communication from Judith Sim 20.5.09).

Franks discusses a qualitative study of barriers to access to mental health services in an East Anglian seaside town. Barriers to seeking services were distinguished from barriers to access. Barriers to seeking services included "different understandings of mental health problems, lack of acknowledgement, discussion and prioritisation of mental health problems, stigma, lack of knowledge of services, fear of authority and lack of trust." And barriers to accessing services included "previous negative experiences of accessing NHS services, resource limitations, lack of interpreting and translation services, and practical barriers such as transport and hours of appointments."⁶⁹

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In Scotland, as elsewhere, health services come some way down the list of new migrants' priorities among services they may need to access.

An Edinburgh study used an action research approach and face to face questionnaire with a snowball sample of 67:

"Five volunteers from the EU8 countries were identified to pilot the questionnaire as interviewees, then to use their social networks in a 'snowballing process' to access respondents from EU8 countries.[...] the group was selected to cover a mix of age, gender, background, country of origin and occupation."p24

A further sample of 17 users of homeless services in this study were accessed through homelessness services and interviewed in depth, which identified the following:

'the majority of EU8 migrants presenting to services were male, and respondents reported that EU8 nationals most frequently seek assistance from housing and accommodation services; followed by employment; welfare benefits; health; and language support. This study found the level of knowledge amongst EU8 migrants about their entitlements to assistance from housing, homelessness, health and social care services was poor.'⁷⁰

The majority of A8 Citizens' Advice Bureaux clients in Scotland in 2008 were married or living as a couple. Their main issues were benefits (36% of A8 enquiries) and employment (23% of A8 enquiries). Health enquiries were a lower proportion of A8 enquiries (0.7%) than of all enquiries (1.4%) Their health enquiries included enquiries about access to health care, but there was no further information about the nature of health enquiries.⁷¹

GP Registration and Attendance

Blake Stevenson's report on A8 Nationals in Glasgow ³¹ found 35% were aware of health services, 32% had used them, 2% had not been able to find or use a health service, and 18% wanted more information. A dedicated website was the second most current source and most useful new source of information. Further, the Glasgow study found 58% not registered with a GP, perhaps because the majority were between 16 and 34 years old, were reluctant to register with a GP and did not know what services were available. In Aberdeenshire Love^{72:23} found 59% of migrant workers were registered with a GP, 35% of females and 13% of males had consulted a GP in past 2 weeks compared to Scottish Health Survey (SHS) 2003 figures for the general population of 20% of women, and 16% of men. In a Fife study,²⁵ 56% were not registered with a GP.

In Scotland there is a limited amount of evidence that the need to register with the NHS through a GP is not fully accepted by some European migrants in some health board areas.⁷³ However, part of the reluctance to use GPs is cultural rather than knowledge driven. From an A&E study reported by Bray et al⁷⁴ 'over 50% who travelled to Poland visited their doctor for treatment & tests, also telephone advice given and even medication sent'. The recent review by Rolfe and Metcalfe concurs with the idea that it is not lack of knowledge that always prevents take up of NHS services by migrant workers.^{5:41} However they do say (:40) that for some groups such

as asylum seekers and refugees and less voluntary migrants who are not actually refugees, [such as the Roma] language and knowledge is a bigger issue for access to health services. In some parts of Scotland it was professionals' knowledge that was the issue. One study found GPs were unsure of migrant workers' rights to treatment.³⁵

The Roma migrants in one study were found to attend the GP's when they need a doctor, but were not aware of a need to register in advance.⁷⁵ This is a cultural issue but as it is around access it is included here. If registered they tended to miss appointments made for a later time (p9). Language barriers are important, unavailability of interpreters can lead to wasted appointments and discourage patients from using the system. At first appointment, registration and patients' histories take a long time. Outreach work by health care professionals to patients' homes to improve immunisation levels meets communication difficulties also. Around 50% of the Govan Roma were registered with a GP by mid 2007 (with effort from professionals, receptionist and support workers).

Other issues for Roma people included school attendance (they placed a lower cultural value on formal education plus there was a need to supplement male breadwinners' earnings). Segregated schooling in Slovakia made it difficult for them to adjust to different norms at school. Roma migrants:

“cannot access job centre plus or other state services and schemes (such as New Deal) due to the complex regulations limiting their usage, thus narrowing their legal employment opportunities.”^{75:5}

A report on migrants' lives beyond the workplace⁷⁶ found 33% of migrant workers knew how to register with a GP on arrival, and emphasised the need for migrants to know they should know some basic English before migrating to the UK. This was not just Scottish research, so this problem is not uniquely Scottish.

Access to other health services

In a Fife study,²⁵ 91% of European migrant workers were not registered with a dentist, 84% had not used a hospital, 90% had not used housing or medical/health advice services, and 4% had used childcare advice related services, 23% of people who had used childcare advice related services had used private nurseries and 23%

had used health visitors. In a Tayside survey⁷⁷ it was found 28% of migrant workers had accessed health services, which 61% described as good, 26% as average and 13% as poor. The proportion giving a poor rating suggests a need to find out why. These issues may affect the settled population (who may just not have noticed a gradual deterioration) and need addressing, or the migrants may need to acquire appropriate skills as health care users in Scotland, for example in booking timely appointments. In a Grampian study,⁶⁷ migrants did not identify specific difficulties in accessing health services. Around half in this study had registered with a GP and half had used the internet and welcome packs. GP registration was not a priority for those on short term contracts, and no difficulty was reported in locating an appropriate GP through personal contacts.

There was a particular issue with NHS24 being not widely known among migrant workers, which was reported in a Grampian study.⁶⁷ NHS24 was viewed positively by only one of the 3/87 workers who were aware of it.

Dental care was mentioned as an issue by Gorman⁷³ and that is corroborated by the Grampian study^{67:117} which found none of the 87 participants were registered with a dentist. Love found that the cost of Scottish dental treatment discouraged use by Polish workers.^{72:26} Dental care was a generic issue for migrant workers, evident in US farm workers for example.⁷⁸ Northumberland Multinational and Minority Ethnic Group (MMEG),⁷⁹ also found difficulties accessing dentists were more serious than those in accessing routine health care.

A recent WHO bulletin emphasises making health services accessible to all, treating people as individuals rather than focusing on the needs of specific migrants. Dr Sally Hargreaves, Hon. Research Fellow in migrant health at Imperial College, London is quoted as follows: "there is a "real need to explore and document models of best practice in the developed-world context for delivering services to various migrant groups, and their impact on health outcomes." ⁴

Inappropriate use is an access issue as well. In a study of Eastern European Attendances at A&E⁸⁰ the researcher took Eastern European sounding names from A&E attendance register for past year and reviewed appropriateness of attendance. This gave 224 attendances 127 appropriate and 97 inappropriate. 15% of the 224 attendees were registered with a GP. The conclusion was that attendance among

Polish people was no more inappropriate than that expected for the general population.

Domestic abuse issues were specifically mentioned in a number of reports, especially in an Edinburgh study which highlighted that:

- Female EU8 migrants are accessing domestic abuse services, but very limited support can be offered if a woman has no recourse to public funds
- Female EU8 migrants who are fleeing domestic abuse can have more complex issues than indigenous clients, because the sense of isolation from family, friends and familiar culture is increased
- Female EU8 migrants with children can be left in a vulnerable situation if their relationship breaks down: in several cases, women have been left destitute because they have not worked or registered on the WRS.⁷⁰

Improving access

Among a minority of respondents in Love's study who sought help for a health condition in the last 12 months, services were ranked on ease of access.^{72:27} The easiest of access was smoking, then accident, physical illness, alcohol problems, mental illness, sexual health, drugs, and teeth or gums. The factors making access less easy (most difficult first) were waiting lists, appointment system, opening hours financial costs of service, advertising of service, and location of service. 135 females and 9% of males had used a hospital (in for 1 night plus) in the past year – slightly lower than Scottish overall figures.

Use of health related services – mainly for dental appointments and smear tests, - was 16 % of those surveyed. Access was more difficult to three particular services than for other services. The services more difficult to access were dental services, sexual health services, and substance misuse services. Barriers to access were waiting lists, and opening hours. Costs were a particular barrier to use of dental services.⁷² This is an example of cost sharing. A Finnish report found that co-payments – cost sharing requirements - can act as a barrier to access for some groups: those at risk of social exclusion are disproportionately affected by the financial burden of health care costs.¹¹ However, dental services and prescriptions

are the only ones in the UK that involve cost sharing, and therefore this may not be as big an issue as it is in Finland.

A service access initiative was carried out in Fife, where the NHS improving health team (IHT) provided health advice and materials at workplace events for migrant workers.⁸¹ Key themes identified as a priority by the IHT were –

- Accessing GP, Dentist and emergency health care services and NHS 24,
- Sexual health issues, including accessing contraceptives and sexual health clinics,
- Other community based support mechanisms, e.g. Citizens Advice Bureaux (CAB)

To improve access to health services, leaflets on NHS 24 were accessible online in alternative languages.⁸¹ Display boards were made up with information and contact details for NHS 24 and the CAB, and some medically related terms in Bulgarian, Russian and Polish. Handouts detailing sources of free condoms and contact details for local sexual health clinics were also made available. Free condoms were distributed at the events. The evaluation report suggested holding events in other venues as well – libraries and local town and common meeting areas (games rooms and canteens).

An Edinburgh study of EU8 migrants found most respondents regarded themselves as healthy and more than half of the respondents (39) said that they knew how to access NHS services.⁷⁰ Only six respondents reported that they needed assistance with issues such as welfare needs, mental health support or learning difficulties; and only one of these had actually contacted a service for support.⁷⁰ Respondents indicated that to improve accessibility to services, there should be more information in EU8 languages and multilingual staff available at key services.

In a list of policies prioritised by migrants for future NHS improvement in Love's 2007 study (p32), easier access to a dentist came first, followed by easier registration with a GP, then easier access to substance misuse and alcohol services, and better hospital discharge procedures. Better access to a gynaecologist was also mentioned.

Ways of improving NHS services seen by Love's respondents are shown in table 1 below:

Factor (n=95)	%
Polish 'Language Line' in all NHS facilities	58
More medical staff able to speak Polish	53
Leaflets and documents in Polish	48
Shorter waiting times	30
Better appointments system	30
Someone to accompany you to service	25
More 'female friendly' service	13
Better location of service	10
Better reception staff attitudes	5
Better medical staff attitudes	3

Table 1 Ways of improving NHS services^{72:30}

Improvement was also sought in staff attitudes, reported by Love (p30), particularly GPs and nurses in GP surgeries, and receptionists in both primary and secondary care.

Migrants' preferences and service access

A study of 87 migrant workers in Grampian found they regarded their home healthcare quality as better (although hampered by lack of equipment) and preferred to return home for routine treatment.⁶⁷ This was in spite of access to care in Poland, for example, being facilitated by bribes, and privatisation in Latvia. Sharp and Bitel found a similar phenomenon in Highland, reporting a Latvian worker who was told he had to wait two months for some results and who preferred to pay as in his home country to get results quicker.^{82:17} Nevertheless the study found there was an impact on services, and challenges for service providers.

Access to health care services in Scotland is restricted for migrant workers by the language barrier, by their knowledge of access routes and rights, by problems in getting time off work, and by their own and health professionals' cultural settings and expectations about the provision of health care. Emerging evidence suggests that some Polish migrant workers use healthcare in both the UK and Poland. A lack of access to support for migrant women suffering domestic abuse was found in Scotland. Methods to improve access adopted or tried in other countries include the health promotor from the migrant community, ensuring basic language skills before arrival, clear knowledge of rights to treatment (migrants and professionals). A number of initiatives have been tried in assessing the extent of migrant health care needs in Scotland, but appear to have been patchy and short term, with a lack of strategic structure, and there is no national guidance on models of best practice for primary or secondary care.

Language

Fluency in the host country language is one of the protective factors against mental health risks identified by Helman.^{8:327}

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Migrant workers in Grampian, Scotland, were concerned about the potential for misdiagnosis from their lack of knowledge of English, and also worried about confidentiality.⁶⁷ The majority perceived language and communication difficulties as the main barriers to receiving effective care and attention. There was a similar finding for minority ethnic communities in Dumfries and Galloway⁸³ Similar issues were found in England by McKay and Winkelman-Gleed (2005).⁸⁴

A Glasgow study of barriers to integration⁸⁵ found language difference was an important barrier to integration, and an Edinburgh study cited language as the main barrier in providing services to EU8 migrants.⁷⁰ Language issues which affect access to and use of health care services are translation and interpretation (duplication here too).⁷³ Learning English as a second language (ESOL) is seen as the most appropriate long term solution^{5:41} rather than expensive interpretation or translation, however new migrants may not find that realistic. Language difficulties affected care during childbirth with delays for interpretation for informed consent to epidurals for example.⁸⁶

The relationship between language and access is pointed up by Love's findings on service improvement needs⁷² – which were for language services and quicker access. Language services chosen by Polish migrants, in order of priority were a Polish language line for all NHS health facilities, more medical staff able to speak Polish, and leaflets and documents in Polish. After these came shorter waiting lists, better appointment systems.

A Needs Assessment of migrant workers in the Scottish Borders⁶⁸ recommended a welcome pack and interpretation and translation and English training services, so was probably part of the evidence base for the later multiple and complex needs initiative in Borders. NHS Grampian has used data on usage levels of interpreting services to show an increase in 2008 (27,406 minutes) from 2007 (21,298 minutes). That is a 29% increase. This was mainly from new European workers. Demand for the Polish language increased most, by 33%.⁸⁷

There is wide agreement that although translation and interpretation may help workers overcome initial problems, overcoming language barriers by learning the host country language is a better long term solution.^{88:60} There was special concern for health consultations among the Communities Scotland Grampian sample (n=87) because of a worry of misdiagnosis,^{67:precis:3-4} but a Tayside study found 46% of migrant workers who might have benefitted from English language support had not received any assistance.^{77: precis:4} In Northumberland, language issues were also found to affect the expression of emotions, symptoms, and needs to GPs.⁷⁹ The Scottish government has committed £3m over 3 years 2007-2009 for ESOL infrastructure and provision, but more needs to be done to facilitate attendance.^{33:17} English is both a pull factor for migrants here and an incentive to improve their knowledge of English, we could capitalise on this motivation by facilitating ESOL even more. At peer review a useful review published by the Joseph Rowntree Foundation in 2004 was included as a pointer to wider context of work in this area. It was also valuable for its emphasis on the importance of trust and empathy to users of interpretation services. This can be established with family and friends and with professional interpreters.⁸⁹

The Northumberland Multinational and Minority Ethnic Group (MMEG) study enriched knowledge of the importance of language barriers, saying language is a major barrier to migrants in working up to their real skill qualification level.⁷⁹

There remains a need for translation services for new migrants, particularly in emergency and maternity care, but in the longer term ESOL is one Scottish solution to language problems and also removes a barrier to integration.

Emergency care

Farm workers in the US used the emergency room because they were uninsured.¹³ There was a different situation in Scotland under the NHS, but from certain studies, a similar result. Some migrant workers in Scotland were unsure how to access services and attended A&E inappropriately when a GP would have been more appropriate.³⁵

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Use of emergency services rather than primary care gatekeepers was a choice, not only a result of lack of knowledge. It is a trend visible in the settled population as well, habituated though they are to GP use. In Lothian, Scotland, inappropriate use of A&E by the A8 population was perceived by A&E staff to be higher than expected, but in fact was not greater than in the general population.⁷⁴ Inappropriate attendance was higher in migrants registered with GPs than in migrants not registered with GPs suggesting “dissatisfaction with GP care and lack of direct access to specialists may be important issues for the A8 population that are likely to influence ED attendance.”⁷⁴ Cultural awareness training about other healthcare systems was recommended. Access to health care in central Europe is ‘fairly immediate’ with ‘direct access to specialists and tests’, and GP services less developed than in the UK.⁷³ Thus there was some frustration with waiting times in the UK, and Scotland, which may be exacerbated for migrant workers as a result of language problems and not understanding the primary and emergency care systems, or being refused emergency care because not registered with a GP.^{67:115-116}

In Aberdeenshire, 18% of migrants surveyed had used A&E in the past year.^{72:23} That was low compared to Scotland (SHS 2003 figure = 36%). In conclusion, the picture across Scotland is of variegated A&E use by migrant workers.

There is an issue in some parts of Scotland about perceived inappropriate use of accident and emergency departments. This may not reflect actual use. Migrants may understand GP care and be registered with a GP but be dissatisfied with it owing to long waiting times, inconvenient hours and language barriers. Overall, the picture of A&E use by migrant workers in comparison to the home population is variegated.

Physical health problems

There may be specific clinical problems affecting migrants. The literature search found a specific example involving a Comorian immigrant community from the sub-Saharan area, living in Marseilles, France, reported by Grassineau. They had a rare blood type, so blood donation was encouraged from those individuals. This example may appear puzzling, so an additional one, not from the literature search but from the peer review stage, and more relevant to the UK is given, that of thalassaemia and sickle cell anaemia. These are genetic conditions which may have evolved to give some protection from the most severe forms of malaria.⁹⁰ Thalassaemia affects people from all populations, especially those genetically of Southern European, Arabian and Asian origin^a and sickle cell disease affects people genetically of tropical and subtropical origin especially African origin.^b

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Such special factors are exceptional, most migrants have similar physical vulnerabilities to the host population, with for example headaches and colds and flu being the most common health problems in the past month reported in Love's study.^{72:20} Love's study on health and ethnicity in Aberdeenshire⁷² found that one third (38%) out of 99 migrant workers studied assessed their health as less than good compared to 25% of the general population in the Scottish Health Survey 2003. Bronchitis was the most common disease reported. Psychological wellbeing suffered as well.

^a <http://en.wikipedia.org/wiki/Thalassemia>

^b http://en.wikipedia.org/wiki/Sickle-cell_disease

The Aberdeen study^{72:19} categorised issues by frequency and by where treated – Poland or Scotland (table 2 below). The majority of those treated were treated in Poland.

Condition	% with condition	% treated	Location of treatment of sufferers		
			Scotland %	Poland %	Both %
Back trouble	34	59	21	68	11
Chronic bronchitis	30	96	-	100	-
Stress	21	50	30	30	40
Stomach disorder	18	88	7	80	13
Piles or haemorrhoids	10	44	50	25	25
Heart trouble	10	100	10	80	10
Migraine	10	33	33	33	33
‘Other’ chest trouble	8	100	12	88	-
Severe depression or nervous illness	7	57	25	50	25
Rheumatic trouble or arthritis	6	50	-	67	33
Varicose veins	4	50	-	100	-

Table 2 health issues in Polish migrants and where treated

The more immediately incapacitating conditions were the ones more likely to be treated. In a separate table Love displays the conditions found in his study by whether the majority were treated, equally treated and untreated, and untreated for the majority (ibid p18).

Majority treated conditions were: chronic bronchitis liver conditions, chest trouble, stomach disorders, heart trouble, cancer, severe depression, high blood pressure, stroke, migraine, back trouble and epilepsy. Equally treated/untreated were: hepatitis, varicose veins, rheumatics/arthritis, diabetes and stress, and majority untreated were: alcohol problems, asthma, and piles or haemorrhoids.

Love found much lower levels of long term illness in Polish in-migrants in Aberdeenshire (14%) than in the Scottish population generally (41-42%) (Ibid. p.17) and lower levels of recent street drug use in Polish in-migrants than in the Scottish population. In a list of illnesses and conditions prioritised by migrants for future NHS improvement in Love's study (p31) physical illness came first, then mental illness, physical disability, teeth and gums, alcohol problems, drug problems, and other (e.g. female health).

Immunisation for TB was still a particular issue in the Glasgow Roma among whom TB was still prevalent³¹. Community safety issues were noted, especially with Roma in Govanhill, Glasgow.³¹

Important physical health issues concerned access to dental care, here the cost was a barrier, and a high proportion of migrant workers assessed their physical health (especially respiratory) and Psychological wellbeing as less than good. Not surprisingly, long term conditions were less frequent than in the general population in new young migrants. Admitted illicit drug use was also lower. A particular group, the Roma, had a particular issue with TB.

Diet

A review of ethnicity, health and nutrition related diseases in the UK found some were healthy and others not, and speculates on the reasons, especially for the second generation, who ate more fat than the first generation. It concludes research is needed into dietary changes and exercise levels in migrants.⁹¹

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Migrants in a Grampian study⁶⁷ bought and cooked their own fresh food but there was some criticism of the quality of Scottish food owing especially to the high amount of processed food. Minor change to health related to diet such as weight gain/loss was not perceived as serious.

In a separate study of ethnic minority health Lean found that increased cardiovascular risk in South Asian women in the West of Scotland was substantially

explained by their lifestyle factors and parity rather than their weight or BMI.⁹² This is related to diet in terms of calorie intake, since obesity is caused by an imbalance between energy intake and use. As pointed out at peer review, there is a much larger literature on minority ethnicity in relation to diet and health, which cannot be covered here. As a pointer, only three dietary interventions studies were found in a review carried out in Scotland by Netto et al.⁹³ Two were from England one from the US. They employed different methods: cookery clubs, a healthy eating and exercise group and a nutrition education programme, all of which changed behaviour.

Little evidence was found that ill-health among migrants is caused by poor diet in Scotland.

Sexual health

Recent material points to an increase in migration by single women, and particular issues they face.⁹⁴ Other special groups such as trafficked women⁹⁵ and young asylum seekers⁹⁶ have special needs, which have particular need of expert qualitative approaches to research. Work on migrants and syphilis in the UK exists, but is not recent.⁹⁷⁻⁹⁹

Burns found that African migrants in the UK tended to access HIV care late, despite health promotion efforts and advances in therapy.¹⁰⁰ In a separate paper Burns suggested there was a different appreciation of risk in these communities, and also “Institutional barriers to care exist; these include lack of cultural understanding, lack of open access or community clinics, failure to integrate care with support organizations, and the inability of many General Practitioners to address HIV effectively. Community involvement should include input to ensure there is: better cultural understanding within the health care system; normalization of the HIV testing process; and a clear message on the effectiveness of therapy.”¹⁰¹ There is a wider body of work on African people living with HIV in the UK and Europe, well summarised in a review by Prost et al. This confirms the importance of effective paths to testing, low perception of risk, low condom use, the importance of including men in prevention initiatives, and difficulty in accessing services owing to stigma.¹⁰²

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There is a large body of work on sexual health and ethnicity, which was not identified by the literature search, but is mentioned here for completeness following comment at peer review. A useful though as yet unpublished literature review was carried out by Sim, who comments that the relationship between sexual health and ethnicity is highly complex. The review was focused on “persons of African or Afro-Caribbean origin, Asian origin, Latin American, Amer-Indian and Pacific Islander origin living in high-income economies.” The review aimed to “synthesize the broad question of prevention effectiveness for reducing HIV-risk behaviour in four identified subgroups of these populations (MSM, injection drug users, heterosexuals and youth/adolescents) and to identify both patterns of success/failure in these interventions as well as the best evidence of effective interventions.” Sim covers themes of “STIs, teenage pregnancy, behaviour (and its interaction with faith, generation and other correlates), access to services and interventions.” Selected messages included that diverse knowledge and conflicting messages were found for teenagers, and contraception use among some groups (e.g. South Asian married women) although increasing, was not as high as for the home population.¹⁰³ A literature review on ‘The Sexual Wellbeing of Young Black and Minority Ethnic People’ was published by NHS Health Scotland in 2007.¹⁰⁴ This review recommends sharing good practice, supporting more local work on sexual health needs of Black and Minority Ethnic young people, monitoring the quality of sex and relationships education for this group in schools, providing sexual health services for them, supporting parents and professionals, and supporting the local and national ‘joining up’ of national policies for sexual health and race equality.

STIs, and contraception are sexual health issues for EU migrant workers in Scotland (as they are for the settled population).^{73;81} Family planning clinics were found useful and helpful by 2/87 participants who used them in the Grampian study.⁶⁷ Logan and Teijlingen¹⁰⁵ carried out a study in Moray, rare because it was well focused on a particular migrant health issue, in this case ‘fertility control’(sic). Of 10 migrant women requesting abortion it found 6 were first time pregnancies. Many migrant workers in Moray do not routinely register with a GP as they are resident for only 3 months, however there has been increased female migration in last 10 years, with new access to contraception issues. In the women in the study, there was low ‘pre-

morbid'(sic) registration (4/10), and low knowledge of location of the sexual health service (3/10).

Many in the Moray study were working in unskilled occupations, which was stated to further limit access to health services through financial vulnerability to taking time off, so financial security was more important than relationships (which were also more likely to be unstable). These workers were likely to have greater language barriers and where many were employed, have less exposure to Scottish nationals. They usually arrived with contraceptives but then ran out and were unsure where to get more, or were not aware that they could be obtained free (a barrier), and there was little previous knowledge about the Long Acting Reversible Contraceptive (LARC) methods. For those in Moray who had registered with a GP there had been missed opportunities in primary care to provide advice prior to becoming pregnant, for this though, as new migrants, they needed information in their own language.

Recommendations from the Moray study were that the local Equality and Diversity team and the Racial Equality Council should liaise with both employers/higher learning institutes and A8/Eastern Europeans to highlight the health and business gains from effective fertility control. The study identified empowering and hindering factors around contraception for A8/Eastern European women.

The empowering factors came under four headings, help with language problems, (but GPs never used 'Language Line' telephone interpreting service) drop in appointments that minimised time off work, being allowed time off work for appointments, information sources, and a non-judgemental and caring attitude by healthcare staff. The hindering factors were language problems (lack of proficiency in English and lack of language appropriate written information sources throughout health services), financial priorities, lack of knowledge of contraceptive choices, lack of awareness of interpreter rights, availability and free provision and cultural issues around fertility control. The role of GP compared to the gynaecologist was not understood – A8 migrants equated fertility control with the gynaecologist's role rather than recognising GPs had expertise in that as well. There were some other barriers in primary care – loss of self management opportunities, loss of opportunistic discussion during other consults, and long waiting times for appointments.

Ensuring good access to sexual health services was important in Glasgow where an initiative involved block booking a clinic with an interpreter available.³¹ There was an

issue for migrant women's health reported in Lanarkshire, Scotland, in that non-working wives were less likely to speak English and communicate needs on cervical or breast screening or concerning pregnancy to GPs.³⁵ Health issues in relation to women employed in the sex industry were mentioned but not corroborated.³⁵ However there has been recent media publicity from a newspaper investigation about 700 female migrants trafficked as sex slaves in Scotland.¹⁰⁶

STIs and fertility control (sic) are the main sexual health issues for EU migrant workers in Scotland. Little work was found on fertility control, but some on STIs in other migrant groups (BME populations) in Scotland, which recommended methods to improve service uptake. The Scottish work focused on female sexual health. Opportunities were missed for sexual health promotion work (e.g. contraceptive choices) in primary care. Migrants were not fully aware of the different roles of primary care and specialist gynaecological care in Scotland.

Migrant workers with disabilities and older migrants

Special groups within migrants include people with disabilities, and a qualitative approach was used to assess their needs in London by Refugee Support.^{107:7} The voluntary sector was seen to be taking on a disproportionate amount of the burden of care for disabled refugees. For people with disabilities, recommendations cover review of access by mainstream disability service providers, staff training on this client group for mainstream disability organisations, and improvement of data collection systems and information about the needs of this client group. There is also UK work on South Asian people with learning disabilities. The prevalence of severe learning disabilities amongst UK South Asian communities may be up to three times higher than the general population.¹⁰⁸

The issue of whether immigrant elders could access health care in Islington were researched by Livingston. He found they were able to access health care.¹⁰⁹

Scottish Studies

There is Scottish work on ethnic elders by Netto, who published in 1998 on the respite needs of ethnic elders' carers.^{110;111} She concluded they needed, but had a low uptake of respite care, and that:

“Respite services which are currently available could also be made more appropriate to the needs of these carers by accommodating differences in linguistic ability, dietary needs, gender sensitivity, and other religious and cultural differences.”¹¹¹

Work on disabled migrants and older migrants was found outside Scotland. Provision of mainstream service access for disabled refugees was a recommendation from London work. No barriers to service access for immigrant elders to services in Islington were found and there was some Scottish work found on ethnic elders’ carers’ use of respite care.

Long term conditions

Long term conditions like diabetes have been shown worse than in the general population in migrants to Scotland, for example Asians (who may be first or second generation migrants). South Asians have higher rates of coronary heart disease, diabetes, hypertension, stroke, hip fractures, and renal failure.¹¹²

Scottish Studies

Diabetes may be surrounded by different health beliefs in migrant workers in Scotland¹¹³ where South Asians were grateful for free health care but it made them reluctant to criticise. They expected physical examination and were disappointed when they did not get it. They found it difficult to change their diet owing in part to cultural pressures.¹¹⁴ When white and South Asian beliefs about the causes of diabetes were compared, the South Asian people tended to attribute diabetes to external factors, while white people tended to blame internal failings within themselves.¹¹⁵

The non-biochemical reasons for higher rates of CVD in South Asians were assessed in Glasgow. Three hypotheses were advanced after anthropometric and lifestyle risk factors (except for smoking) were shown to be in excess of the general population; they were “insulin resistance, stress, and socioeconomic deprivation. The high CHD rates in South Asians were likely to result from a complex interaction of risk factors.”¹¹⁶

In Scotland, work in Tayside has shown the need to take care when evaluating the relationship between diabetes and deprivation in cross-sectional studies, as health selective migration confounds the relationship between diabetes and deprivation, because those with diabetes are more immobile than those without the condition. They stay in deprived areas rather than migrate out.¹¹⁷ Similar findings were made in Northern Ireland. Geographic variations within a country in risk factors for a topic (eg blood pressure) can affect all migrants or those from a particular country.⁹⁹

It seems a plausible hypothesis that migrant workers with existing diabetes or who develop it in the host country may have less access to regular health checks and prevention measures if they are not registered with a GP, or communicate with them less well than the general host population. No direct evidence was found on this, but one pointer comes from Sweden, where needs for education in health professionals have been identified in relation to the effectiveness of communication with migrants with diabetes.¹¹⁸

Migrants can suffer more from long term conditions than settled populations. The reasons are not well evidenced, but may be multi-causal, including less access to care, less understanding of their illness (as contrasted to disease) from host country health professionals, greater adaptive stress and greater deprivation (although the deprivation hypothesis has been challenged).

Maternity care

The confidential enquiry into maternal mortality shows that Black African women, including asylum seekers and newly arrived refugees have a mortality rate nearly six times higher than white women. To a lesser extent, Black Caribbean and Middle Eastern women also had a significantly higher mortality rate.¹¹⁹

A recent paper from the BMJ states “Mothers from ethnic minority groups are more likely to breast feed and less likely overall to use tobacco and alcohol during pregnancy than British/Irish white mothers. Maternal health behaviours worsen (smoking during pregnancy and lack of breast feeding) with length of residency in the UK, an indicator of acculturation.”¹²⁰

Scottish Studies

In pre-natal and maternal health EU migrants can find the NHS system unsympathetic to their preconceived expectations, and difficult to understand and use,⁷³ but also report good experiences – fathers being allowed to be present at the birth for example. The Polish may fly back to Poland to get extra scans.⁷³ Seeing a midwife rather than a gynaecologist is unexpected for some A8 migrants. Maternal health care differed in Scotland “In Poland surgical dilatation is routine. It is carried out always - no matter whether necessary or not.” Polish worker reported by Gorman.⁷³

Specific health concerns from Glasgow included pregnant women who did not attend antenatal care.³¹ Roma (from Bulgaria, Romania or Slovakia) were one example of this.^{75:86}

Although culture frames experiences of care in other areas we may be particularly aware of this in maternal health care because there is more research available. Differences in behaviour and expectations were found in migrants as compared to the Scottish population.

Child health

As reported by the Confidential Enquiry into Maternal and Child Health, in England, Wales and Northern Ireland, the overall death rates for children from families of Pakistani and Black African origin children were significantly in excess of the rate seen in white children.¹²¹

For migrant workers' health it is important to achieve early integration and embed psychological schema that are functional for the host country, thus preventing health problems related to culture-bound health worldviews being transmitted through the generations, for example beliefs justifying unhealthy diet, drinking and exercise patterns. Yet Scotland has its own culture of ill-health, which migrant workers' children need protection against through evidence based health promotion. The Finnish Health Inequality Action Plan¹²² recommends steps be taken so “that children of immigrants can participate in at least part-time early education by the time they are

three years old.” (:53). The Finnish Action Plan does not omit to mention health promotion, though not just for children, it recommends:

“in line with the development of integration measures for immigrants, a plan be drawn up for the special needs of immigrants covering health promotion”^{122:60}

Schneider summarises the health problems of migrant children under four heads:

- “1) diseases and conditions caused by overcrowded and poor living conditions and frequent moves to new climatic areas with different water supplies and native viruses;
- 2) nutritional problems;
- 3) congenital anomalies, inherited conditions and allergies, and
- 4) neglect and lack of adequate medical treatment.”¹²³

As well as treatment, Schneider suggests parental and child health education as one solution to these problems. As additional background here, the general education of their parents was found a factor associated with children’s health in a recent US study¹²⁴ and maternal education showed increasing association with child stature between two cohorts (1986 and 2001) in a Polish study.¹²⁵

Scottish Studies

In Glasgow, for childcare, 35% of A8 migrants were aware of childcare services and 11% wanted more information.³¹ Migrant child health issues in Glasgow included malnutrition/dehydration, overcrowding in properties, inappropriate clothing for the weather, children needing medical services but not registered with GPs.³¹ In the past, child growth in immigrant children in Glasgow was studied by Goel, who found “In all immigrant groups, children born in Scotland were on average, taller and more advanced in bone age than those born in their country of origin”. Diet and social class did not explain this.¹²⁶ Possibly migrant workers look after their children’s health more than their own.

Child health is linked to early years education and parental health education and this is important in facilitating early integration. Three of four recognised categories of child health problems were found in Glasgow migrant children, where there was also quite low awareness of childcare services.

Changes in health after migrating

The 'Healthy Migrant' effect "states that those who are psychologically and physically strong are more likely to leave their home country and less likely to return when facing difficulties" see Kirkcaldy et al¹²⁷ quoted by Weishaar.⁸⁸ If migration is more push than pull, that might operate against the healthy migrant effect.

The 'happy migrant' effect (which may partly explain an apparently healthy migrant effect) suggests that migrants are reluctant to assert healthcare rights and minimise negative experiences of health care.¹²⁸ The healthy migrant effect has been both challenged and supported. For example foreign born status was associated with worse maternal outcomes in university educated mothers¹²⁹ but for internal migrants birth outcomes were better than for non-migrants.¹³⁰ Extreme cases of push migration such as asylum seekers for example may be more unhealthy than both their compatriots and the host population, as may 'illegal' migrants. An interesting and powerful approach to researching the healthy migrant effect is to use twin studies comparing migrants and home-based twins. A study of Finnish twins living in Sweden and their co-twins residing in Finland showed that on average the migrant twins to Sweden from Finland became healthier in Sweden, as CHD prevalence fell.¹³¹

The 'healthy worker' effect, which simply states workers are healthier than people who don't work may apply initially to migrants, but could reduce if they are employed in less healthy jobs in the host country. For example, South Asians' length of residence in Glasgow was found to be an immigration-related factor related to ill health, with longer residence associated with:

"almost consistently worse results. More were overweight, reported heart trouble and respiratory conditions, had had accidents, experienced symptoms, especially respiratory and psychosomatic, needed glasses and took time ill in bed."¹³²

Finally there is a missing migrant effect, shown when commercial address tracing fails to track migrant moves as well as home population moves.¹³³ That could also explain the healthy migrant effect if the missing ones are the unhealthy ones.

A study in the UK showed that for migrants within the UK, blood pressure was influenced primarily by the area they were examined in (area of residence) rather than area of birth. Those living in the south of England had lower blood pressure than those living in Scotland.¹³⁴

Scottish Studies

In a Grampian study no participants reported new health-related problems as a consequence of migration to Scotland.⁶⁷ A Glasgow study reported that new migrants' health got worse, however the two groups may have stayed on average for different periods they may have stayed longer in Glasgow.³⁶ Love⁷² reported that for at least 20% of Polish in-migrants the move had impacted either positively or negatively on their health. Physical health tended to improve while psychological health often deteriorated. Deterioration in health tended to affect people aged over 25.

Migrant mental health in Scotland appeared more affected by the migration than was physical health. But there was some evidence of self reported deterioration in physical health following migration. That could be linked to unemployment or work disadvantage. Other evidence links some indicators of physical health to UK region of residence. Follow up to assess long term effects is difficult.

Second generation

Incidence of disease in first generation migrants can vary from the general population, and may warrant particular targeted attention. For example Haworth found higher mortality from cirrhosis and liver cancer among migrants from Africa, India and the Caribbean.¹³⁵ He suggested "selective screening for hepatitis B and C and other tumour markers". Harding found differences in incidence a variety of cancers by country of origin.¹³⁶ He suggested "sensitive targeting of primary interventions".

The transmission of health problems between generations is important because there are needs to include the family context for migrant health, to set the health issues in the life course in order to fully understand them, and to be sensitive to possible effects on society. For example in some countries migrant communities form areas of multiple deprivation. An example of health problems continuing down to the second generation in the UK is found in Irish migration to Britain. Although their country of origin neighbours the UK, generations on, people of Irish descent still tend to have worse health than the UK population generally.⁹¹ Geographical closeness of the country of origin is not necessarily a protective factor. It may possibly help to maintain cultures that are less competitive in the UK. Mechanisms of transmission are not always elucidated, other than a connection to social class, for example by Abbotts.¹³⁷⁻¹³⁹ Abbotts compares the Irish Catholic migrants to the UK population rather than to their forbears. In South Asian health Williams concludes that in comparison with their forbears, “Favourable health behaviour has brought a health advantage to young British born Asians.”¹⁴⁰ Shams found similar effects.¹⁴¹

In a Dutch study, a mechanism for transmission of some disadvantage was suggested by van Oort, who speculated that “Ethnic disparities in mental health in adolescence may play a role in the development of ethnic disparities in educational attainment.”,¹⁴² and found this to be the case for Turkish women but not Turkish men in comparison to the settled Dutch population.

Scottish Studies

In a west of Scotland study, Williams found that “prosperity was not predictable from levels of education in the subcontinent and from this and other signs it appeared that a wholesale redistribution of class chances was occurring among British South Asians, disrupting inter-and intra-generational continuities in the relation between class and standard of living.”¹⁴³

In some migrant groups and in some members but not others, health issues are transmitted down generations. This could be diet or other health related behaviour patterns, or a pattern of exclusion reflected in social class, but reasons are not well evidenced. Little Scottish work was found on this.

Integration

A study carried out by the Centre on Migration, Policy and Society (COMPAS) at the University of Oxford reviews evidence on effective integration methods for new migrants (<5 years since arrival in the UK). As part of this, a useful review of the research on the integration of new migrants in relation to their health was carried out by Johnson.¹⁴⁴

Johnson suggested the short term aims for migrant health are equity of access, response to specific needs, and in the longer term parity of health and well being. Reporting a review of migrant health in London, Johnson states the main issues still hold true, and from the Scottish work seen to date they apply in Scotland as well:

“The following are the key findings and issues raised in the London studies.

- Migrants’ needs change over time – both within cohorts and between different cohorts.
- Health status on arrival is ‘not especially poor’ (on average) but tends to deteriorate.
- Disease problems are exacerbated by the conditions in which refugees live after arrival.
- Problems arise from temporary registration and refusals of medical services to register refugees.
- There is little evidence of effective initial health assessment, screening, monitoring, and subsequent referral and health surveillance of new arrivals.
- Interpretation and language support are crucial and inadequate.
- Most projects are stand-alone, short-term and uncoordinated, and few are evaluated.
- GPs may not be aware of prescribing patterns in countries of origin, as refugees are unaware of local practices in the UK.
- Overcrowding and conditions in hostels create health and hygiene problems.

Another issue Johnson picks out from a different review of service providers’ experiences is to the point, but it is unclear whether this is a problem for general practices in relation to migrant workers more generally in Scotland.

“GP surgeries that offer good and appropriate services to asylum seekers . . . become well known . . . This leads to a disproportionate number . . . using these services and puts pressures on them”.

Johnson identifies gaps in the evidence on integration,

- research on post-migration stress and related psychosocial problems of refugees or other migrants;
- the effects of detention on the mental health and psychological well-being of refugees, and its impact on integration;
- nutrition, particularly with respect to poverty/vouchers or not being able to purchase or cook familiar food;
- access to leisure/exercise facilities and its effect on the health of refugees and other new migrants;
- refugees with special needs or disabilities, particularly children with special needs, and their problems in accessing health services;
- the sexual health of refugees and teenage pregnancy.

In nearly all research, [Johnson continues] the focus has tended to be on a poorly described and confused overlapping cohort of asylum seekers, refugees and other migrants of similar ethnic or cultural background, without care being taken to establish their precise status or the impact that this may have on their health or health care access. There is almost no published research that is sufficiently targeted specifically to examine the situation of other types of new migrant.” (p66-67)

Johnson also identifies gaps in research and information initiatives:

“There is still a need for a better information and evidence base, and acceptance of the valid findings of existing reviews, along with appropriate action and resources to support these.

Specifically, the evidence base would benefit from a number of initiatives or developments:

- a longitudinal 'tracker' survey of new arrivals, from first arrival in UK (including the asylum seeker phase, if relevant);
- evaluation and publication of results from the many initiatives set up to address the above issues;

- a period of stability in NHS and immigration procedures and structures to enable organisational learning;
 - data recording ('ethnic monitoring' or 'patient profiling') which includes data on dates of migration and citizenship status and enables better systems for identifying numbers and characteristics of migrants; and
 - development of co-ordination systems between health authorities and other sectors, to support multi-agency solutions to local needs and overcome problems of communication in dispersal-based asylum seeker processes.”
- (p67)

Scottish Studies

In Scotland, the longitudinal study method may suit the Scottish Centre for longitudinal studies at St Andrews.

A study from Lanarkshire³⁵ found that as well as migrant workers being often over qualified for the jobs they held, they wanted to mix rather than to create a 'little Poland'. The main barriers to integration identified by questionnaire in a piece of research carried out by the West of Scotland Racial Equality Council in 2007⁸⁵ were language (see also^{34:67-68}) and lack of information provision on goods and services in different languages. In addition to language difference, media attitudes and the attitudes of the Scottish people (especially harassment by young people) were main barriers to integration found in a Glasgow study.⁸⁵ In this study too, a better understanding of Eastern European culture was suggested by a migrants' focus group (e.g. respect for older people) as a solution, and more awareness in the A8 migrants about racial discrimination (they were reluctant to perceive themselves as racially discriminated against) and more consideration of the needs of A8 clientele by service providers. The questionnaire asked about problems in various areas. The area giving rise to most responses of 'ever' having had a problem were benefits (19% of responses (15/77)) and the least problematic was education (3% of responses (2/77)). Health problems were mentioned in 6% of responses (5/77). Individuals could name more than one problem area. Nearly half of the respondents felt excluded from society. They appeared to feel Scottish people thought too much about A8 migrants as coming from a 'worse life and a worse country'. In Fife, although 80% said they had been treated well by local people, only 57% felt they had

integrated well into the local community, and 25% had experienced verbal abuse, and 5% physical abuse related to ethnicity or nationality.²⁵

There was a difference between some of the studies in findings on reported intentions to stay. In Tayside 63% expected to stay in the UK and 58% to stay in Tayside,^{77:43} while in Grampian most did not see themselves staying in the UK for the long term.⁶⁷ In a study of migrant workers in Fife, 40% of people were planning to stay in Scotland indefinitely. The reason for coming was to earn more money and to join friends/family already here.²⁵

For Scotland, there is a need to help migrant workers integrate better. Relevant evidence on barriers to integration and gaps in evidence on integration is confirmed in a study by COMPAS. Useful sources of evidence would be longitudinal studies.

Mental health

The latest edition of Cecil Helman's classic work on culture, health and illness covers mental health in some depth in the chapter on Migration, globalisation and health. He cites admission rates to mental health hospitals, addiction and suicide and homicide rates as evidence that migration carries an increased risk of mental illness. The reasons, he says, are complex and not fully understood, and some groups of migrants are affected but not others.^{8:320} He mentions employment status, housing conditions, and the reactions of the 'host' society as possible contributory factors, to which he adds personality factors, cultural background and the original reasons for migrating. Helman presents six conceptual ways of analysing causes of the mental health problem,^{8:323-6}

1. Multimigration, where the migration involves several simultaneous transitions, for example between climates, classes, religions, and types of community (village, city, rural, urban),
2. Push or pull (already discussed),
3. Selection stress. Helman identifies three types:
 - a. people with pre-existing mental disorders may be more likely to migrate,
 - b. migration creates stress which precipitates mental illness,

- c. or other variables may confound the association between mental illness and migration, for example age, class and culture conflict.
4. the attitudes of the host country (discrimination etc),
5. Psychosocial transitions – major disruption to an individual's assumptions,
6. Cultural bereavement – a traumatic sense of loss of the homeland, may be collectively reinforced or fought.

Helman lists protective factors, which include migrating as a family unit, retaining family constancy, having entrepreneurial ambition, financial resource, language fluency, education and portable skills, local contacts, and a coherent religious or cultural worldview, especially if that supports family cohesion (p327). An outgoing personality can be protective too.

Mental health may be mediated by alcohol misuse and linked to higher suicide levels in young men.⁷³ Psychosocial problems, as with mental health, can often be considered as upstream of the access problems which may delay treatment of physical problems.

Public health values about equalities and socio-psychological theories about stress link through the evidence on work-related stress. Migrants, like any new worker, may be low in a work hierarchy, but unlike workers from the host country as temporary workers they may have little prospect of advancement, they may be employed in a post which does not reflect their education or skills, as their qualifications may not be recognised, or inadequate language skills may hamper their progress. Being lower in a work hierarchy is bad for health as shown by Marmot's studies of UK civil servants^{145;146} cited by Hertzman, Frank and Evans.¹⁴⁷ Marmot showed that blood pressure and stress stayed high after work in those at the bottom of the hierarchy but not in those at the top, independently of factors other than hierarchical level. Seniority was independently associated with an increased lifespan, as confirmed in long term follow up, which showed 25 year mortality effects from hierarchical position for a range of different diseases.¹⁴⁸

For the particular case of schizophrenia, stressful contact with a foreign culture and need for change in role or lifestyle in a context where no satisfying model is available but it is impossible to return to the former life are common factors for societies with high prevalence. (Murphy cited by Corin¹⁴⁹) Schizophrenia outcomes vary and are perhaps better in third world countries (from the WHO study quoted in Corin¹⁴⁹) so we

need to be alert to the possibility that migrants with a vulnerability to developing this mental health problem (and we know some people are genetically more vulnerable than others) may be more likely to develop it in the UK than in their home country. This may have implications for the health improvement screening of new migrants. Helman cites two studies which showed higher rates of mental illness, especially schizophrenia, in migrants, firstly (Carpenter and Brockington, 1980), in Asian, Indian and African immigrants living in Manchester,¹⁵⁰ and secondly in (Hitch and Rack 1980) in Polish and Russian refugees in Birmingham 25 years after they had settled in the UK.¹⁵¹

Corin describes a set of four causal complexes related to stress disorders in a context of culture change. To very briefly summarise:

1. Having low resources in a culture expecting high spending, which undermines social identity, but less so if you are upwardly mobile.
2. High attachment to traditional lifestyles – may vary, e.g. by gender – migration for a period off a rather matriarchal Indian reservation was beneficial for young men's health, but not for women's health.
3. Cognitive dissonance created by needing to satisfy two value systems – e.g. among high status men (on traditional norms) in a displaced migrant group of Tokelauans in NZ, those who subscribed to non Tokelauan values had higher blood pressure.
4. Difficulties in sustaining traditional support strategies arising from the need to adapt to a new society. EG Samoans, migrants to California, kinship networks and church congregations become increasingly monetised, so to keep up with them costs money, this particularly affects high status individuals with limited access to the resources necessary for demonstrating their prestige – for them high kindred involvement was associated with high blood pressure, but for high income people it was not. There was a higher impact on women.

This is important knowledge for Scottish health professionals in enabling them to implement culturally sensitive practice.

Corin suggests that research on culture change has emphasised the change as a cause of stress which in turn causes health variations. But in mental health, culture research has gone further than that, to understand how particular social and cultural determinants affect health (the mechanisms). There are three levels of influence:

1. cultural variables affect how disease manifests in a particular cultural context (e.g. contrasting attitudes to schizophrenia in Ireland (guilt, sin) and Italy), neurasthenia in China, there it is seen as a physical complaint so there is no stigma.
2. the impact of a stressful event is mediated by its (culture dependent) meaning e.g. Camberwell study (Brown et al 1978, 1989): depression was associated with life events, but more strongly with those events seen as a 'loss'.
3. whether traditional culture is protective or harmful (even in situ), and whether the alteration of cultural practices in a new environment can convert them from protective to harmful. For example, women are intensely committed to their family of origin in the traditional society of Outer Hebrides, and there is limited availability of social roles for them. They are in this way caught up in 'axiomatic relationships', which cannot be broken except at the greatest cost, which 'accentuates the degree of stress associated with the loss of a close relative'. Here 'axiomatic means 'taken to be self-evidently valid', (and also validating), so taboo to break.

Again this is important information for health professionals in Scotland who are attempting to implement culturally sensitive practice, what is not so serious to a Scottish settled person may be much more important to the mental health of someone from another culture. In dealing with migrant health we also need to remember our own ethnocentricity – our own culture is often transparent to us so we don't realise we cannot see it.

Cross cultural studies are needed to make epidemiology relevant to increasing cultural diversity. Culturally sensitive practice is required in both health promotion and health care.¹⁵² For example, a system that acknowledges & embraces medical pluralism would assist the development of culturally appropriate health care provision to Chinese women.¹⁵³ Here 'medical pluralism' means an ability for patients to participate in more than one medical system, for example to use both Chinese traditional medicine practitioners and western medical organisations. Using two medical systems helped the Chinese women to overcome barriers when accessing health care.

It is important to study psychosocial wellbeing and mental health because these can condition coping, accessing health services, adaptation, and can protect against

physical illness. Stress and coping in the context of adapting to a different culture are touched on in a paper from the International Centre for Migration and Health:

“For a variety of social and biological reasons, including chronic stress, poor dietary adaptation, and rapidly changing lifestyles, migrants appear to be more vulnerable than most populations, to type 2 diabetes and to cardiovascular problems such as hypertension and stroke”¹⁵⁴

The World Mental Health Day 2007 report includes much material on cultural difference and a section on migrants. This states that women and older people who are migrants have a greater risk of mental health problems than other migrants. The difficulties migrants face that affect mental health include:

“•Decrease in socioeconomic status

- Lack of recognition of overseas qualifications, including educational and employment experiences
- Low levels of language learning and proficiency
- Separation from social, religious and cultural networks, particularly family and friends
- Social isolation and lack of support
- Prejudice and discrimination by the host population
- Traumatic experiences or prolonged stress prior to or during migration
- Acculturative stress
- Language and cultural barriers to mental health services access, including stigma about mental illness and lack of knowledge regarding available services
- Breakdown of traditional and family support structures, particularly family and relatives, with intercultural conflict being a major contributor”^{155:25}

These mental health problems may present as physical problems. There is other material in this report on cultural sensitivity, for example on how acceptable forms of greeting may vary, and how levels of stigma from mental illness may vary between cultures. Some of these migrant mental health problems are corroborated by the 400 page Global Health Report 2. That report has a section on access to health care for migrants and asylum-seekers^{156:77} which states “Poor mental health is commonly due to social isolation, poverty, loss of status and hostility from the local population.”

An anonymous paper from Finland supports the theory that migrants have stress and mental health problems but underuse mental health services.^{11:14} The paper suggests that barriers to access (especially language) are one cause of this underuse of mental health services, especially with reference to asylum seekers and refugees. The lack of culturally and linguistically appropriate health information was also important as a barrier. the Finnish paper refers to Scottish work:

“the work of Health Rights Information Scotland,^c which is a project funded by the Scottish Government to produce information for patients on their health rights in an attempt to raise the quality of information available in the NHS. The information is developed centrally for the use of all health boards in Scotland, and as well as being translated into the most commonly used minority languages, the information is also available in ‘easy read’ versions, audio format, and British Sign Language. The project also acts as a resource for organisations within Scotland who wish to develop their own patient information, and provides advice on translation, formatting, and consultation with service users so that information is appropriate for its audience.”¹¹

Scottish implications are that it may be needful to check how well this internationally profiled Scottish work has actually covered migrant workers.

Mental health is directly related to physical health through self-harm and suicide. These topics have been researched in migrants. Merrill looked at Asian, West Indian, Irish and Scottish immigrants in Birmingham. Males and older females were underrepresented, but Irish females and Scottish of both sexes were overrepresented in comparison to English-born residents. The rates of self-poisoning for all four immigrant groups considerably exceeded those of their country of origin, the difference being most marked among young Asian females.¹⁵⁷ In a study of migrant suicide in Perth, Australia, Burvill found higher rates in male migrants generally and particularly Scottish male migrants¹⁵⁸ Burke found Irish migrants were grossly overrepresented in UK city of Birmingham statistics for attempted suicide.¹⁵⁹ In contrast, Helman cites Raleigh and Balarajan who found migration to the UK did not increase the risk of suicide which was similar to those in the country of origin.¹⁶⁰ A later paper from Raleigh confirmed higher suicide rates for Asian women and raised suicide rates for young Caribbeans, both in the UK.¹⁶¹ In a review of evidence about

^c www.hris.org.uk for further information

high suicide rates among Irish migrants to Britain in relation to the identity and integration hypothesis, Aspinall has suggested there was a need for more evidence from individual-level analysis.¹⁶²

Shields et al¹⁶³ called for more research into well being, which the current review supports:

“Further investigation of the psychosocial well-being of ethnic minority migrant groups is needed, in order to isolate effective sources of social support, which can then be promoted.” (p5)

This report further states that migrants’ well-being improves as they get better qualified and suggests the government could assist migrants with learning English and to gain UK qualifications, which have an advantage in the labour market. The Northumberland Multinational and Minority Ethnic Group (MMEG) study found homesickness and stress. The latter resulted from exploitation (long hours, long travel times) and insecurity, with 3% on medication for anxiety. The MMEG found financial worries and verbal abuse added to mental health problems, and there was lack of awareness on mental health services apart from GPs. One suicide resulted from inability to cope in the new country combined with pressures from family at home.⁷⁹

Scottish Studies

In Scotland, a study of minority health and well being in Dumfries and Galloway found a perception of stigma about mental health issues which discouraged ethnic minorities from using mental health services. These attitudes may map across to migrant workers, though migrant workers were not distinguished in this study.⁸³ A small proportion of homeless EU8 service users at the Cowgate Centre had acute mental health problems and addictions. Meeting their needs was complicated by communication problems and cultural differences.⁷⁰

Scottish work has started to show there may be an issue around hierarchical organisational position for migrant workers in Scotland, as many migrant workers are known to be employed below their educational level. Elsewhere, a Finnish review found higher unemployment in migrants, and this especially affected asylum seekers

and refugees. Health professionals who were refugees found it particularly difficult to get employment at an equivalent level to their home country¹⁶⁴ quoted in an anonymous Finnish report.^{11:16} Barriers have also been identified to the employment of ethnic minority people in the Scottish NHS.¹⁶⁵

Migrants may not only end up lower in the work hierarchy than their home qualifications would warrant,^{88:15} but also have the stress of adjusting to a new culture and the longer term 'permanent temporariness' of their situation, a feature of the 'migrant condition'.^{88:56;166:193} Lazarus' theory on stress and coping¹⁶⁷ as adapted by Weishaar⁸⁸ from Lazarus¹⁶⁸ and Berry¹⁶⁹ for an Edinburgh qualitative study states that the person in a new environment is seen as going through an appraisal stage, a coping stage and then adapting psychologically, socio-culturally and physically. Stressors found by Weishaar can include language difficulties, family conflicts, loss of social support, guilt and regret about migration, and are more intense for those with a higher degree of cultural difference from the new country, which includes those holding more traditional values, and bad working conditions are also a stress factor.^{88:13-15 34:52-53} Effects on health are confirmed by Weishaar, who acknowledges some migrants do not experience deterioration in health. Coping can be by accessing social support in the country of origin and in the host country. Protective factors include knowing the language, having attitudes favouring integration and assimilation, participating in activities and having plans for the future. According to Weishaar these issues apply equally to A8 migrants as to other migrants. Her interview findings confirmed the Lazarus model, that success of adaptation depends on learnt mastery techniques and suitability to specific situations rather than on the amount of conflict. There are differences between individuals, situations, and the success of adaptation in individual situations.^{88:50-51} In Weishaar's study many participants reported themselves healthy, and attributed this to character traits, attitude and successful coping strategies, though climate, pathogens, and the different health system were uncontrollable factors in ill-health. The selection of the eight interviewees and two focus groups used snowball sampling, including friends of the author, which may limit theoretical generalisability of this work.

Mental health may be the key to improving physical health in at least two ways - by increasing ability to cope with difficulties in getting access to health services, and by preventing suicide, homicide and rape; the three latter may also involve addiction problems. Not much attention has been paid to the mental health of migrants in Scotland. Two murders by migrants in Scotland have been given extensive media

coverage in the past year.^{170;171} Some form of mental health check would be indicated for newish and not so new migrants, who may be healthy when they arrive, but not after a period of residence. Another implication for Scotland is the need to track the changes in mental health of new migrants in the first few months or years. Another question remains: do migrants to other countries suffer mental health problems to the same degree as migrants to Scotland? The answer to this might be helpful for mental health promotion, and prevention of mental ill-health services for the home population.

In conclusion to these issues, social and cultural variables cannot be reduced to a few indices. These environments are a system of interacting variables and processes. Similarly with the effects of different stresses – they need to be related to social and cultural context.

Emerging evidence suggests that migrant mental health in Scotland appeared more affected by the migration than was physical health. But there was some evidence of self reported deterioration in physical health following migration. Follow up to assess long term effects is difficult.

Mental health is a high priority for migrant health in Scotland, as much, possibly more than in other countries. It is of interest that there is limited evidence that Scottish migrants to other countries tend to experience the most mental health problems. Alcohol and drug misuse perhaps used to cope with stress brought about by work conditions, lack of support networks and problems such as racism encountered by migrants to the UK may make migrants more vulnerable to mental health issues. Some mental health issues such as schizophrenia may be brought out more than in their country of origin in vulnerable migrant individuals in high stress western societies, but strains may exist with networks in country of origin also. Stigma may cause migrants from some cultures particularly to underuse mental health services. Mental health issues (e.g. depression) in turn may be a barrier to access to physical health services, and linked to chronic physical health problems and violence.

Health and safety at Work, Occupational Health and Workplace Health Promotion

A lot of work has been carried out on American farm workers occupational health, with some studies explicitly about occupational health needs. In a recent study, US Migrant farm workers' most frequently reported health problems were physical, with dental care the most common need.⁷⁸ Another example is "Call for Health' (CFH) where Information Specialists identify and connect farm worker families with

community health care, vision, and dental services in response to their medical questions and concerns.' Specialists can provide interpreter services.¹⁷²

Hawkes reports an initial evaluation of a US 'Community Collaboration for Farm worker Health and Safety, which is a community-based undertaking comprised of migrant farm workers, agricultural employers, health professionals, and community stakeholders.' It has started well, but there are issues with irregular attendance by some team members, difficulties with some of the essential tasks designated for the team, and imbalance of power among members of the team.¹⁷³

In another longer established US community partnership model, 'during a yearly 2-week immersion experience, 90 students and faculty members provide health care services, including physical examinations, health screenings, health education, physical therapy, and dental care for 1,000 migrant farm workers and migrant children.'¹⁷⁴ This is intended to help the students' appreciation of the health issues migrant workers face in their own communities. With approximately 2 to 5 million migrant and seasonal farm workers in the United States, their health is a big enough issue to justify the creation of an institute, 'The Farm worker Health and Safety Institute.'¹⁷⁵

In the USA Zahm and Blair introduced a journal issue reporting approaches developed from an Epidemiology Research Group including investigators and migrant health care workers from c.20 institutions. They discuss a study of migrant farm workers in the USA¹⁷⁶ recommending a life history approach using a life events calendar involving the use of sticky labels for life events. In another study, exposure to hazardous substances in adults and their children was assessed by monitoring chemical markers. Tracing migrants was seen as crucial for follow up in a cohort study or for locating individuals for interview in a case control study. An attempt to set up a cohort of farm workers for future epidemiologic research is the subject of another paper mentioned by Zahm and Blair.

Craw and McKay have produced a review of the health and safety risks of migrant workers in the UK.¹⁷⁷ From qualitative research in five regions in England and Wales, they cite language differences, inadequate training and information, motivations for working long hours and antisocial shifts (especially for pregnant mothers), gaps in responsibility for temporary and casual working and experiences of racism and discrimination. They recommend that employers with migrant workers should adapt

their health and safety policies procedures and practices to ensure such workers are protected against any risks. Temporary and agency working, short periods of work in the UK willingness to take on any available work, lack of employer checks on skills are other risks.

The Finnish health inequality Action Plan says that the “National Public Health Institute, STAKES and the Finnish Institute of Occupational Health will jointly produce a study on the health and service needs of immigrants.”^{122:61} This is interesting for the explicit involvement of the Occupational health specialism in strategy formation for migrant workers health.

Scottish Studies

In Scotland, workplace health issues picked up by this literature review include work in the fish processing industry in Grampian, which was thought to create problems with joints and breathing attributed by interviewees to the cold and wet conditions,⁶⁷ and repetitive strain problems resulted from some food processing work. All 87 respondents in the Grampian study had received some form of health and safety training. A number of injuries were reported in this study, mainly treated at work. Participants were prepared to receive care from their employers. In one case of an accident with chemicals neither employer nor employment agency were prepared to expect responsibility and the victim was pressured to return to work before she felt ready. This employer had a poor health and safety record. Another issue involved English being the official language of the workplace, which had implications for those who could not read health and safety notices in English.^{82:28}

Health and safety at work was the subject of over twice as many responses wanting more information as health services in the Blake Stevenson East Renfrewshire study,³⁰ but around two thirds the number in the larger Glasgow study. There, 35% were aware of health and safety at work, and 12% wanted more information.³¹

A Borders study suggested addressing specific health issues through workplace health, for example through health screening in the workplace, meeting health and safety requirements and health education.⁶⁸ There was no information on health needs from an employer study into the impact of migrant workers in Orkney,¹⁷⁸ which

makes the point that there is little current emphasis on health promotion at work for migrant workers. Workplace health promotion is an obvious avenue for migrant workers, stress screening is one avenue, and trade unions help could assist.^{88: 62}

Although there is evidence that some form of health and safety training is given to migrant workers in Scotland, there is little evidence of co-ordinated community-based approaches to workplace health promotion such as seen with farm workers in the US.

Occupations, accommodation, employment and the economy

The relatively new feature of migrant working is the development of an international labour market, helped by quick cheap transport. As WHO recognises, the increased the number of people on the move creates barriers to health which must be addressed.⁴

For Kjellstrom, globalisation can exacerbate the 'problem of staff shortages in many developing countries as nurses and doctors choose to migrate to wealthy countries for higher salaries and a better career.' Positive effects in Sweden have been 'facilitated immigration of a young work-force, [and] fast access to international knowledge,' Negative effects include 'increased stress at the workplace due to international competition'.¹⁷⁹

In a report of a conference on English local authority initiatives by Moor,¹⁸⁰ migrant workers were found to have displaced some low-qualified local workers into unemployment in the East Midlands (with possible consequences for their health). A buoyant economy was seen as important for sustaining community cohesion in Slough; in Crewe cultural differences in behaviour and translation services were key concerns. In Norfolk, Moor reported a need to establish a demographic profile of migrants for agriculture and horticulture industries and criteria for data use in it was stated. In South Lincolnshire long working and travelling to work times were highlighted, poor skills match to employment, accommodation overcrowding, and discrimination.

Not only the work, but also the home, environment, is important for migrant health,

since migrants' home and work environments are often different from their hosts. Home safety interventions have been implemented and evaluated for example for child safety in Texas,¹⁸¹ and a US study compared two conditions: home safety and first aid training compared to alcohol and drug prevention training, for 11- to 16-year-old, Hispanic migrant youth, finding the home safety/first aid group more knowledgeable about first aid after the intervention than the alcohol and drug prevention group after their intervention.¹⁸²

Scottish Studies

Migrants in Grampian, Scotland, did not perceive any health problems related to living in multiple occupancy accommodation, although many were in such accommodation.⁶⁷ A recent report from Highlands reports real barriers to reporting health and safety issues in accommodation for fear of losing the tenancy.^{82:15} In a study of migrant workers in Fife, 90% were currently in paid work, most commonly as a factory/process worker (40% of jobs), their living arrangements were mostly rented privately.²⁵ In Borders, a study called for attention to ensuring Houses of Multiple Occupancy complied with the legislation.⁶⁸ High rents and overcrowding were found in an Edinburgh study.⁷⁰ High levels of overcrowding in HMOs run by private landlords prepared to turn a blind eye were found by Poole and Adamson.⁷⁵ Social housing stock was inappropriate for the family sizes typical of Roma people.

A Home Office report from 2003¹⁶³ states that:

“Employment is crucial to the psychological well-being of ethnic minority migrants, with unemployment and physical ill-health having substantial adverse effects.”(p5)

It is therefore unfortunate that the cost of the Workers Registration Scheme (WRS) at £90 is a disincentive to registration for some communities who have few resources, e.g. the Roma community in Govan.⁷⁵ Entitlement to in work benefits arises only after in work for a year, which Roma are less likely to achieve.

Community stresses can result from perceived displacement of local people from employments taken up by migrant workers, but there is little current evidence of this from Scotland. Accommodation can bring health issues for migrants related to safety and which may be underreported in Scotland. The cost of workers registration is a greater disincentive to registration for poorer migrants in Glasgow.

Culture

As well as being an important factor to take into account in research strategy and methods, culture affects interactions with health professionals and use of services, particularly, but not only, in mental health. A good example was given by Sachs,¹⁸³ who distinguished between illness and disease, seeing illness as culture dependent, without explicitly saying disease is not. She contrasted Turkish and Swedish patients' expectations of doctors, and showed how doctors' roles varied in the two contexts, and how Turkish patients had a folk sector in Turkey where there was no equivalent in Sweden.

The Turkish doctor was expected to firstly alleviate symptoms, was authoritarian, knew medicine would not be taken after symptoms subsided, so might inject antibiotics rather than prescribing a course of pills. The Swedish doctor had to be sparing with medicine until the result of the tests came back, and Swedish doctors had become less authoritarian and more informal. If her child fell ill an Anatolian woman knew a force, cold or heat, had entered the child's body – but why her child and why now? She attributed it to either God, evil spirits, a magic act by another person or the evil eye. The Turkish folk sector used magic, which could operate remotely on a patient in Sweden. So a Turkish peasant woman attending a Swedish doctor would confront new questions about the causes of illness and the effectiveness of treatment.

The Turkish took self-care for granted, but in Sweden confronted a welfare society with check ups, and health visitors, who wanted to control their health care of their children, so the Anatolian women lost confidence in their ability to manage their traditional responsibilities, and began to frequent the waiting room more and more, creating an unexpectedly heavy burden for the health service. These issues created problems for clinical staff which they perceived as “deviant symptomatology”, “deviant care seeking behaviour”, “deviant presentation of complaints.”¹⁸⁴.

This example sheds light on Scottish issues, implying there is a possibility that the NHS in Scotland may be unwittingly institutionalising health care and disempowering people, with possible dysfunctional consequences for all. On the other hand Scotland could be learning from migrant workers about their coping and self-care methods, and some lessons might be applicable to the host population as well.

Johnson¹⁴⁴ discusses the main contributory factors affecting migrant health as language, ignorance of the system, cultural competence of local health care systems, and cultural competence of local health care staff. Others emphasise understanding the culturally diverse rather than being culturally competent.¹⁸⁵ The psychological climate, disposable income and poverty are further factors. Another example of studies of cultural differences and health from further afield is Dankners study of post-partum depression in Jewish Jerusalem women, which suggested that “cultural factors, including role definitions, community support and rituals, may explain discrepancies found in the incidence of postpartum depression.”¹⁸⁶

A Finnish paper identifies lack of culturally competent services as a key factor in access – negative experiences can discourage people from seeking help, for example, not all doctors have experience of different types of diseases that may not be common in Finland.¹¹ UK examples include leprosy.¹⁸⁷ For Scotland the implications of this are that clinical staff need to be aware of migrant diseases that are not common in Scotland, and also, because illness (as distinct from disease) is culturally determined, aware of illnesses that are not common in Scotland.

Health professionals’ attitudes to migrant workers may not be as enabling as they could be, for example Hjelm found Swedish health workers believed migrants’ knowledge about bodily functions and diabetes was believed lower than settled Swedish people.¹¹⁸ There have been calls for more culturally competent nursing practice, for example in Spain,¹⁸⁸ and the UK,¹⁸⁹ but no specific mainstream nursing initiative on this for migrants has been found in Scotland at national level.

Professionals’ education about migrant health issues is an important area, Barton reports a US training initiative for 13 nurses with high levels of maturity, motivation, and independence, and ability to cope with stress and ambiguity. The nurses grew in terms of cultural understanding and sensitivity, and changes in their application of theoretical transcultural concepts were investigated.¹⁹⁰

Scottish Studies

There are some signs of initiatives in these areas but they are not yet mainstream in Scotland, e.g. the DVD training initiative (see interventions section below).¹⁹¹ There is a wider body of research in the UK on racism, cultural competence, and training of health professionals on cross cultural working. In depth examination of that is outside the scope of this review. Work is in progress on barriers and facilitators to culturally competent maternity care in Lothian.

In Scotland, a Grampian study picked up an expectation by Polish migrant workers that GPs would give them a physical examination before prescribing, one had expected an x-ray for his chest infection, another, an examination of her elbow.⁶⁷ A study from Borders recommended education of all staff, and migrant workers, in cultural similarities and differences.⁶⁸ An Edinburgh study reinforced this saying staff would benefit from training in working with interpreters; entitlements to health and welfare benefits; the Worker Registration Scheme; and cultural awareness.⁷⁰ In Scotland too, Williams found that “Clinical measures may have under-estimated distress in several South Asian groups. The results may be due to a preference for a particular language of emotion in the affected groups or to a higher frequency of stressful situations which provoke distinctive reactions”.¹⁹²

Tellingly, post natal depression was not well measured in Japanese women by a Scottish depression scale, the Edinburgh Postnatal Depression Scale (EPDS). “With an EPDS cut-off of greater than 12, the criterion used in western samples, sensitivity was zero. Lowering the criterion to improve the instrument's sensitivity merely reduced its specificity. These results suggest that Japanese women may be less likely to express depressive symptoms by self-report, at least when instruments designed for western samples are used”.¹⁹³ There is again a wider body of work on whether the EPDS validates cross culturally and also material on how to assess post natal depression in different populations. The detail of this too is outside the scope of the present work.

For Scotland, these three studies point up the importance of using appropriate measures for migrants and other people from different cultures, especially in assessing mental health, but the expression of physical health symptoms can also be culturally conditioned.

Cultural capacity needs to be incorporated into Scottish health services in order to treat and care for people from other cultures more effectively. There are some signs of a start made on this in Scotland, but health measurement instruments as well as professionals concepts may need adaptation and expansion, so they can accommodate different culturally appropriate approaches to what they may perceive in their own cultural terms as a simple unambiguous medical problem.

Study design

This section discusses methods used in Scottish studies together with those use elsewhere.

From the literature search, some common approaches to research topic design included using routine outcome data comparing migrants with the general population for particular conditions; for example Harding looked at trends for coronary heart disease and stroke mortality among migrants in England and Wales, 1979-2003¹⁹⁴, and Stenhouse used a similar topic in Australia.¹⁹⁵ Routine data on mortality is used for all cause mortality also and Scottish examples of this exist¹⁹⁶ as do English ones.¹⁹⁷ There are also Scottish examples of particular topics investigated from routine data. Examples of this include Fischbacher's study of all cause and cardiovascular mortality by country of birth (these people may have a migrant history, even if not currently migrants).¹⁹⁸

Reviews of topics need not be confined to groups defined by country of origin. For example Proctor reviewed literature on mental health in all asylum seekers and refugees.¹⁹⁹ Studies of issues in particular ethnic or country of origin groups are well represented in the health needs analyses found in the literature review, often triangulated by qualitative and quantitative data. For example Walls looked at Irish Catholic ill health in Scotland: and some links between religion, class and health.²⁰⁰ Abbotts related this group's health disadvantage to their socio-economic position using survey data.¹³⁷ Mullen looked at diet and health quantitatively in this group²⁰¹ and at their alcohol and tobacco use²⁰² and Abbotts also looked quantitatively at these issues, finding stereotypes of heavy drinking and smoking and stoicism did not explain the health disadvantage in this group.¹³⁸

Corin, discussing cross-cultural research (which is of obvious relevance to migrant health research) criticises approaches that categorise people on sociocultural factors saying they fit too well with 'prevalent scientific paradigms'^{149:98} and are only used when biological hypotheses do not explain 'systematic differences in the distribution of health problems'. The current discourse on 'stress' as a shorthand for the effects of all of these 'decontextualises the human subject from his or her place in society'.

These points apply now just as much as in the mid 1990s. The lack of contextualisation makes it more difficult to use sociological reasoning to generate new hypotheses about new casual pathways, and conditions data collection and interpretation. Only conventional knowledge is reproduced and confirmed. But the same life event can have different meanings in different cultures and there can be different life events in different cultures. Kraepelin assumed biological causes and correlates would eventually be found for all diagnostic categories of mental illness. From that stance, WHO "tried to confirm the universal validity of individual predictors associated with the course of illness in Western societies."^{149:100} Such an approach shows a bias toward universality, 'one size fits all' epidemiology, and low interest in cultural variation.

Qualitative ethnographic methods in anthropology use apparently different assumptions to epidemiological research. Anthropology has a systemic approach to causality, with communities and groups as central units of analysis, as pointed out by Corin^{149:100} so a probabilistic view of causality is especially appropriate rather than one based on the logic of a necessary and sufficient connection (which is more appropriate for biological causes at the level of an individual biological organism). Probabilistic causation, where a cause is seen as a factor that increases the probability that an effect will develop, but may be neither necessary or sufficient, is an approach consistent with the scientific and public health goals of epidemiology, and is contrasted with deterministic causation where causes must be either necessary or sufficient or both.²⁰³ The concept of a component cause, where a factor may be part of a causal mechanism but is neither necessary or sufficient²⁰⁴ is an allied concept. So epidemiology, especially in cross cultural studies, is moving towards a more systemic approach to causality. So there is some methodological convergence with ethnography.

The ethnographic method of participant observation has been found appropriate for example for Afghan refugees²⁰⁵ with life history, case study and group approaches.

Scottish studies on migrant health often include a qualitative dimension, but are not often ethnographies. From the perspective of cross-cultural epidemiology, there is a place for ethnography. It is increasingly difficult to obtain ethics permission in the UK for ethnographic study in health settings. Medical Anthropology was highlighted in a BMJ paper as being useful in questioning research categories from a wider perspective than the bulk of qualitative work in, for example, health services research. Anthropologically informed perspectives can ask why quality of life is increasingly valued as an outcome in health research, and compare what people say, think and do.²⁰⁶

Returning to Corin, as an example of a first method of combining approaches, he commends Murphy's study of the social and cultural determinants of the onset and course of schizophrenia. Murphy compares in societies with high and low prevalence of schizophrenia. High prevalence were: Ireland, Croatia, and low prevalence were Tonga, Hutterites, Taiwanese aborigines. Murphy's approach was first to scrutinise evidence for a bias between countries in rates of disease, then eliminate alternative explanations – individual differences in genetics, socio-economic status, diet, exposure to viruses, and (for migrators) self selection and differences in diagnostic criteria and rates of institutionalisation. He then examined the role of collective more intangible and debatable factors in culture, the family and community life, examined quantitative risk factors within the society – which categories of people were at risk in a given society to formulate hypotheses about who is at risk in a given society, and derive social and cultural factors possibly involved. Murphy's final step was to look for commonalities and differences between societies that have high prevalence and that have low prevalence. This approach is probably too resource intensive for normal use, but one finding that is relevant to migration from Murphy's work is that there is an impossible choice between the material advantages of migration and the emotional advantages associated with the home culture. This causes intergenerational tensions for both those who migrate and those who stay at home. Countries with a history of migration tend to have been dominated by powerful neighbouring countries for Corin. That certainly applies for Poland, which has a history of migration, both to Scotland and the UK, and where migration, as a recent qualitative Scottish study found, is a decision “often taken by a household as a whole, rather than by an individual... and Polish migrants often rely on established networks outside Poland and choose their destinations accordingly.”^{88:8}

So networks in the country of origin may not be as supportive as sometimes suggested, and tensions in the networks remaining in the country of origin may play their part in generating mental health issues in migrant workers. For detailed evidence on the health effects of migration cross cultural studies are needed with comparisons between home and host and also ideally one or more control host countries.

The second approach Corin proposes for combining epidemiological and ethnographic approaches is to iterate between in depth community studies and quantitative surveys, using life stories to illustrate the meanings attached to qualitative findings, and to generate new hypotheses which can be investigated quantitatively with culturally sensitive versions of scales and instruments to measure social and cultural variables. Culturally adapted scales include the SF36 health and well-being survey. Corin has identified four challenges in integrating local and national studies (see Appendix 3).

Ahearn suggests moving the research focus away from the individual and on to the family, group and neighbourhood, in an effort to improve the psychosocial functioning of groups as well as individuals. He calls for clinical students' training to use a strengths perspective and avoid focusing on pathology, which medicalises problems.²⁰⁷

Simoës²⁰⁸ discusses an example of a study of Portuguese migrants to Switzerland using two control groups. They were matched to samples of workers in home country and in host country. He says field studies, if random selection is used, are suitable for assessing incidence and prevalence, the interviewer should speak the language and be introduced by someone respected in the community, stressing confidentiality, and that no politics is involved. Ideally he suggests a longitudinal study, with the immigrant group studied in the home country before emigration, or on arrival, and then followed at different intervals. He found in the example study of Portuguese migrants, that only female migrants had worse health than controls, they were more obsessional-compulsive than Lisbon controls. Overall, male migrants were generally more healthy than Lisbon controls and Swiss controls but numbers were low, c20 controls in each group and c65 cases (split 35 females and 29 males). He makes essentially qualitative recommendations 'after long contact with the migrant population'. The lesson from this for Scotland is that the knowledge of Scottish health professionals who have long experience of migrant health work is a valuable

resource that it would be advantageous to tap as would the knowledge and skills of the migrant workers themselves. In Moor's report of a conference on English local authority initiatives¹⁸⁰ a peer research approach was considered successful in Wakefield, and Moor concluded that engaging with migrant worker groups to understand needs and provide information is a critical role.

The concept of the whole lifespan and the developmental level of the person within it was the framework for an Australian study which identified specific needs in a 'sandwich generation' of migrant women providing care to their elderly relatives²⁰⁹. Johnson¹⁴⁴ makes some observations relevant to research approaches, for example to "consider the 'career' of a previous group which began as a refugee stream but has now become a well established minority community, such as the Vietnamese." These may provide the 'best evaluated and most relevant models of good practice.'(p 60)

As a number of commentators point out^{149;183} and as also stated by Ahearn,²¹⁰ using Western definitions is a serious limitation in cross cultural psychosocial research. Some health profiles do have such cultural variants – e.g. the SF36, for which there is a Polish translation that has been found to be valid and reliable.²¹¹ There is also a Spanish version. Cultural adaptation is needed also, and that may not be the same as a straight translation. The SF36 was successfully tested with Latino farmworkers in the US,²¹² and mental health measurement methods, which can include the SF36, were used in the Netherlands to show 'mental health care consumption of migrants [was] predicted by acculturation characteristics'.²¹³

Ahearn like Corin and others recommends triangulation of methods, employing both qualitative and quantitative methodologies to cover the respective strengths and weaknesses of each. For qualitative research he suggests more representative samples and studies to replicate results. For both qualitative and quantitative researchers he suggests using local culturally appropriate definitions. Triangulation using instruments that are both culturally and contextually sensitive is important, and qualitative methods can be used to develop quantitative measures.^{207:177} Another approach mentioned by this author was used with children in a Gaza refugee camp, who were asked to list and describe things that worried them, then using focus groups they were asked to elaborate on these worries, discuss their coping strategies, and suggest advice they might give to younger children who might face similar concerns in the future.

Qualitative focus groups were shown helpful in piloting research instruments in Canada²¹⁴ and in South Georgia in the US.²¹⁵ Franks' 'qualitative study of the mental health needs of refugees, asylum seekers and migrant workers living in an East Anglian seaside town' using qualitative interviews was clearly useful in the UK context.⁶⁹

Studies of topics in particular groups include cancer in Italian migrants to Scotland²¹⁶ and a number of studies in the USA about Hispanic workers for example a review of literature about their alcohol use²¹⁷ and a study to evaluate a community-based tobacco/alcohol use-prevention program group.²¹⁸ A study of the influence of moving to the UK on maternal behaviour¹²⁰ used a prospective cohort design, it was also longitudinal, and shows much more and with better validity than the cross sectional surveys we often see reported from Scotland. Recommendations for research made by Shields¹⁶³ largely overlap Gruer's recommendations:

"Substantial investments could be made in large, nationally representative surveys which take into account the need for detailed information on migrants.[...] Such surveys ought to incorporate a longitudinal or panel element and capture the adjustment experience of migrants over their first ten years in the UK."

A new organisation, the Scottish migrants network has the avowed purpose of ending exploitation of migrant workers.²¹⁹ There is no suggestion that Scottish research has exploited migrant workers itself, but it is important to continue to be aware of that possibility, and particular care should be taken that research does not continue exploitation.²²⁰

Research approaches to add to evidence about changes in migrants' health may be qualitative or quantitative, but ideally the two methods would be integrated and work together. Scottish studies that have attempted this to date have been on a local basis only. There is scope for setting a national framework for quantitative studies on migrant health, with clear connections to local qualitative studies.

Analytical categories for migrant health research

In this section, analytical categories are discussed in general, not separately for Scotland and elsewhere.

The documentation status of the migrants can vary, they may have had papers and lost them, or overstayed the time for which they were valid, they may never have had them, or they may be children. These migrants may become trapped in the black economy, with little access to health care. A Medecins du Monde report quoted in the Global health report, discussing migrants in seven European countries found that “although 78 per cent of the informants had in theory some right to access health care, only 24 per cent had any real access to it.”^{156:66}

Although this report does not focus on asylum seekers and refugees, it is needful to mention some concerns about the mental health of detainees in UK detention centre reported in The Global health report as there are detention centres in Scotland, Glasgow for example. Furthermore, undocumented migrant workers may arrive in these centres, and successful asylum seekers who have been granted permission to stay in the UK may become aspirant migrant workers. The report states:

“Studies in many countries point to unmet health needs and inadequate health care in centres. Research in the UK, Australia and the US has also shown the detrimental impact of detention on the mental health of an already traumatised population.”^{156:84}

Other important characteristics of migrants in relation to their health are have much in common with the general population, for example education level, whether employed and employment conditions, including health and safety, status, job satisfaction. Special factors within these may affect migrants, for example perceived equity of position and reward in relation to educational level, and age, the elderly and unemployed may be especially isolated, and children are vulnerable to social exclusion from deprivation in early years²²¹ and educational difficulties arising through language difficulties and cultural issues also affect children.^{34:69} Sex, and gender are important in particular ways for migrants, Weishaar found female Poles had more adjustment problems – feeling homesick, stronger bonds to home country.^{88:58} Maternity care and sexual health are rising in importance after increased female migration in last 10 years.^{105:13} Clearly sexual health has equal relevance to male migrants, and Weishaar’s qualitative study of young migrant Poles in Edinburgh found they tended to have few close friendships but where they did it was with other Polish migrants.^{88:54}

How recently the migrants have arrived is a key issue for their health as it affects the degree of integration they have achieved. How long they stay is another key issue (anecdotally, many in Moray don't routinely register with a GP as they are resident for only 3 months.^{105:12})

The degree of voluntariness of migration could be related to wellbeing and mental health, especially for trafficked women and workers, and some groups such as the Roma. Education about different cultural expectations is important to help migrants minimise cognitive dissonance and consequent stress with its effects on mental and physical health. Access to health services may be mediated to an extent by mental health – depression may be a barrier to access, but other barriers to access often arising again from differing culturally determined expectations, but also from lack of language skills and knowledge of procedures need to be understood.

Employment issues include whether the employer has an occupational health service,^{105:44} whether (paid) time off is allowed for medical appointments, and whether length of working hours allows time for social support at or outside work as a buffer against stress and as facilitating adjustment and integration.^{88:53} Vulnerability and exploitation may arise from moving from a country with worse conditions and so having lower expectation of employment conditions.^{88:55}

More general theoretical categories (not just about health) are given in a Finnish review.¹¹ The review divides refugees by their reason for coming to Finland and their rights (Appendix 2)

Finally, there is also the matter of the immigration policy of the host country – do they wish to attract or wish to exclude. Currently Scotland would like to attract more migrant workers, while the UK does not. An example of the importance of this perspective is split families resulting from border policy. McGuire describes the health impact of the US – Mexico border policies in this regard.²²²

Some key analytical categories for use in researching and managing approaches to migrants for public health include their documentation status, whether they have been detained from entry to the UK, their education level in relation to their employment, their health and safety at work, isolation, effects on child health, issues related to gender, time since arrival in the UK, maternal and sexual health, length of stay, voluntariness of the migration, mental health as a barrier to service access, and host policies towards migrant workers.

Information issues

This section refers just to Scotland. As Rolfe and Metcalfe confirm:

“Statistical sources of data on migration into Scotland have a number of limitations: estimates below UK level are not robust; available sources measure migration flows rather than stocks; and there is little data on characteristics, outcomes, intentions and attitudes of migrants. The Office for National Statistics (ONS) and General Register Office for Scotland (GROS) are taking action to improve data on migrants.”⁵

In Scotland there is a need to know how long individual migrants stay, age ranges educational levels, employment sectors and parts of the country in order to know what health interventions might be appropriate. What might be appropriate for migrant farm workers in the USA may not apply to Polish students on vacation jobs or filling in gap years, or to Croatian factory workers. An issue for Scotland is the low level of migrants registered with general practices, and some initiatives are needed to increase registration levels. More complete general practice registration data would provide the planning information required as well as the registration visit being an opportunity for health improvement activities, and for imparting knowledge about access to and the organisation of the NHS in the local area of the migrant’s employment. The Moray study ¹⁰⁵ made an information policy recommendation that, as A8 female migrant workers were more likely to request abortion, health information systems should prioritise the collection of A8 ethnicity data. Country of origin data is equally important, however.

Echoing Gruer, there continue to be calls for better routine information about migrants in the UK, Aspinall reviews the routine datasets.²²³ An NHS central register exists covering England and Wales hosted by ONS, and has a valuable role in longitudinal health research, but no reference to this has been found in connection with migrant health. One approach to the accurate estimation of denominators to allow prevalence of disease to be estimated that has been tested is to classify

country by surname.²²⁴ That has been found to have good sensitivity and specificity for European migrants, particularly Polish (98-99%). The false positive rate was 15.4%, false negative rate: 0.2%, but because it uses routine census data the method is most limited by that factor for recent migrants.

The gaps and inadequacies of routine information systems about migrants in Scotland and the UK make it difficult to do effective research on migrant health. A particular problem in this regard is the low level of registration with general practices. A central NHS data repository exists in the UK.

Organisation of services

The mobility of the migrant population makes provision of appropriate services a challenge.^{88:59} Similarly, the ever changing profile of migrant workers makes it difficult to plan to meet their needs.^{67:Precis:2}

Initiatives elsewhere in the UK have included an evaluation of charging migrants for service use by general practices in London.²²⁵ This found 55% of doctors reported having systems in place to identify and charge overseas visitors (including migrants). 84% wanted a better system, but questioned the feasibility of streamlining it across primary and secondary care. The study concluded:

'We identified variations in current procedures for identifying and registering Overseas Visitors, which may result in the inappropriate exclusion of new migrants from free primary care services in the UK. Our findings suggest that the number of OVs receiving free primary care services is low. We need to explore models of appropriate health-care delivery to new migrants in the UK context, drawing on models of best practice from established health services in other migrant-receiving countries.'

The North East Public Health Observatory (NEPHO) report recommends setting up a migrant health group aiming among other things to provide guidance on entitlements and screening, and to ensure that public health work on issues such as smoking, alcohol and diet makes appropriate provision for migrant populations.¹⁹ Similarly, the Yorkshire and Humberside Public Health Network, recommended a regional migrant

and health post.²²⁶ ^d This was to be a part time regional post at a senior grade (8a) shared between three Health Authorities, and supported by the Dept of Health central funds. One aim in the first year was:

“To capture current approaches that are being used to establish health needs of migrants and produce a good practice guide”²²⁷

Scottish Studies

For Weishaar although some initiatives tailored to migrants are needed, “most policies can benefit the migrant as well as the community or workforce as a whole”(p59) A separate migrant health service does not find much support in the Scottish literature. Weishaar suggests mainstream health services should target migrants for health promotion, prevention and health care for psychological, physical and social factors. One mechanism for this is to increase cultural sensitivity and awareness of health problems deriving from migration, among clinical staff where there is a high proportion of migrants. Without going as far as suggesting a European health record, she calls for a system which allows international exchange of patient information.

Although there is little evidence that setting up a separate migrant health service would be acceptable or effective, co-ordination activity to improve the response of mainstream services to migrant health needs is an intervention that has received some interest in public health networks in England. Initiatives to improve the cultural sensitivity of health professionals and psychosocial health are supported by evidence. Models of service delivery to new migrants still need to be explored.

Interventions

It is important to be careful about interventions to improve integration and not to confuse that with assimilation. Assimilation (also called ‘acculturation’) may be bad for the health of migrants, especially those who come from healthier countries than Scotland. In Marmot’s studies of culture change and cardiovascular disease^{228;229} the

^d Migrants means Asylum Seekers, Refugees, Failed Asylum Seekers and Economic Migrants

more traditional Japanese men had a lower CHD prevalence than those who sought non-Japanese contacts, but as Corin says,¹⁴⁹ we should be careful not to jump too fast to say that traditional Japanese culture has a protective value. Maybe greater prevalence of chronic health problems comes about from improved survival of acute problems.

Information initiatives aiming to increase access to health care for migrant workers in the UK have been popular. Some examples are those set up by the unions²³⁰ and UK government.²³¹ Some UK counties have set up their own more local sites. South Lincolnshire migrant workers website²³² links to a lifeskills course for migrant workers. Cornwall has produced an information pack.²³³ There are other examples.

In the Netherlands migrant health educators were tried out to help in 'general practitioners' care for female migrants with psychosomatic problems.' The 'patients' perceived health and coping abilities improved', and the study recommended the migrant health educators should be 'integrated in the patient care delivery for migrants in general practice', and there should be 'further development of intervention methods to address the patients' social support.'²³⁴

Previous work from the Netherlands had suggested there was a danger of disempowering migrants from using their own health knowledge.^{183:50} There has been work looking at ways of empowering women migrants to improve community health in US farmworkers,²³⁵ examination of how 'subtle dynamics of identity, culture and power' help shape migrant women's empowerment experiences, in New Zealand and Canada,²³⁶ and evaluating the use of focus groups of migrant women to review research materials in Canada.²¹⁴

Coping skills have been delivered by migrant health educators in GP services and were found to improve patients health and coping abilities, and a project empowering new female migrants identified influences on empowerment.²³⁶

Scottish interventions

Recent qualitative research^{88:59} found that individuals need to understand migration as a life event and prepare for it, learning the language, training on the culture and

being aware of potential stressors. This approach would integrate key elements affecting migrant worker health, and might form the basis of an educational and skills-based training intervention for new migrant workers.

In the NHS Borders Multiple and Complex Needs Project,²³⁷ an action plan (partly implemented at time of that report) includes leaflets in Polish, Russian and Portuguese. An additional screening section is to be added to new patient assessment tool for new entrants from countries considered high risk for communicable diseases (eg TB). An agreed pathway of information exchange between Borders practices is in place to avoid multiple assessment. Under consideration is a per person payment for this additional screening to GPs. There is ongoing assessment of need. A lead public health nurse is in place for each Borders town for liaison for the Scottish Government migrants outreach service. Each reception desk will have a language system in place (a paper and an e-folder, also laminated prompt cards, interpretation service details (planned and emergency use). Four training events for migrants' needs were held for staff. A locally enhanced service (LES) has been piloted by NHS Borders, by participating GPs from Oct 07 to Oct 08, but no report is available. It was funded via the multiple and complex needs project in addition to the Scottish Enhanced Services Programme 'SESP' for primary and community services. This approach aims to screen new entrants to the Borders as they register in primary care. It covers four groups: homeless people, new entrants and migrant workers, travellers, and people with learning disabilities.

A DVD information and training initiative for health professionals about migrant workers in Scotland gives a good qualitative insight into how cultural differences and understandings interact with access issues as seen through the eyes of migrants themselves. The DVD shows mainly Polish migrant workers recounting their themed experiences of maternity care and primary, emergency and secondary care issues. It highlights that 'easy travel allows participation in two different systems, many people have care abroad & in Scotland'.^{73;191} A manual accompanies the DVD, and includes discussion questions around each theme.

Interventions need to be evidence-based or there is a risk they may make migrants' health worse by disempowering them in using their own knowledge. Migrant health educators and health promoters from migrant communities can deliver interventions, and were found successful outside Scotland. Empowering women was recommended to improve community health (in the US). Language training, screening new migrants in primary care, information initiatives and language systems in place at point of care delivery have been found useful in Scotland.

CONCLUSION

There are diverse health problems and service access issues ²³⁸, also a variety of possible solutions, which need to be appropriate to the health problem or access issue (quantitative epidemiology alone is not enough for needs assessment. ²⁷ So a range of responses are required. ²³⁹

Morling reviewed Scottish work in 2007.²⁴⁰ She offers three options for further Scottish needs assessment work at national level:

1. Do nothing
2. Full health needs assessment
3. Health needs assessment in several smaller specific topics

Of these the third seems the most reasonable. Morling gives it the fewest cons and more pros. Although the current review adds more detail, it does not contradict Morling's work on health needs, but adds a need for a national information framework. The identification of migrant worker groups with clusters of like healthcare needs is the logical next step. It is not clear that migrants' home countries condition their health needs more than these are conditioned by the common factor of moving to Scotland. However although migrant workers to Scotland from different countries face the same issues, they may differ systematically in how they respond and cope. Age and sex differences in migrant health effects have been suggested in the evidence reviewed. For greatest generalisability, migrant worker health needs are probably best assessed and met by age and sex groups, whether they have a family or dependants, and degree of integration (which would cover language, access, workplace health and special groups like the Roma). That should not be clouded by

whether or not they may return home for their health care. In terms of solutions, these will need to fit the health and social integration issues arising out of particular cultures and connected to particular employment patterns, which can vary geographically.

Similarly it makes sense to measure migrant health using existing datasets with additions to allow analysis by migration status, including country of origin, and degree of integration (a proxy would be time since entry to the UK, employment status and social context, e.g. family, partner.)

Enough is known about migrant health problems in general, but there is a need to test out Scottish solutions for Scottish issues and evaluate them robustly for their effectiveness in Scotland. Some local screening and information initiatives have already started, and voluntary health screening in the community (perhaps in partnership with employers of migrant workers) appears a positive step, and is an opportunity for early information provision and preventive health promotion. Migrant health promoters and strategic co-ordination for increasing migrant capacity may be useful.

A longitudinal cohort study would be a useful evaluation approach to interventions implemented, especially in tandem with a multi-site (international) demonstration project, which embeds 'migrant capacity' in current services. Some studies of service use could be case-control studies if data were included on exposure to various migration-related risk factors. Cases would necessarily be matched to non-migrant controls from the home population, but also ideally to controls in the countries of origin and migrants from the same population in other host countries. A qualitative strand and peer input are important to capture perspectives and motivations of migrants themselves.

Scotland needs to compare well with other migrant destinations firstly to improve and protect Public Health, but secondly because Scotland and the UK need to be able to attract the best workers in the new international labour market that has developed. To attract them requires evidence that Scotland is a healthy destination for migrant workers, to support her in competition with other potential migrant worker host countries on health and wellbeing, especially in a new economic situation where her financial attractiveness is compromised because of a weakened currency. Should

that change, or not, in future, Scotland will wish to be in a position to select the best migrant workers, and to protect and improve their health while they are here.

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APPENDICES

Appendix 1

Databases searched and search strategies:

Formal searches were carried out 26/4/09 to 5/3/09

Medline 1950 – Feb 2009-02-26

Terms – see search strategy (MeSH headings (exploded to capture subheadings, and keywords)

501 results initially, and 75 selected on basis of relevance to research topics and issues (130 on D/B, refs 68-198 on D/B)

Cinahl-EBSCO

1986-2009

Terms: migrant and health

416 refs

64 initially selected as sample of relevant research topics and issues to Scotland (199-258 on D/B) (259-298 were duplicates, deleted)

Cochrane Library

Terms 'Transients and migrants' (MeSH heading)

24 refs (299-322)

22 relevant

Combined database of All EBM Reviews — Cochrane DSR, ACP Journal Club, DARE, CCTR, CMR, HTA, and NHSEED

Terms Migrant* and Health

1898 – 2009

49 refs

24 kept on initial trawl (refs 433-457)

ASSIA

Terms – see search strategy (ASSIA thesaurus of keywords)

Earliest to present

110 refs (refs 323-432)

1 relevant (most were about asylum seekers and refugees)

Health Scotland Library

Terms migrant* and health

41 refs (no time limit). Not on D/B, but saved elsewhere on computer

35 relevant

Glasgow university library

No time limits

Migrants and health 5 refs, 2 relevant

Migration and health, 19 refs 1 relevant

Journals searched

Public Health

1889-1898, 1920's, 1960's and 2000's – 62 refs selected on possible relevance of title to immigration, No set selection criteria – sample of papers relevant to immigration by location (eg ports or topic eg infectious disease (1-67) c. 8 used

Lancet 3 selected (found as indexed on Public Health publishers site)

International Journal of Migration, Health and Social Care

7 Selected as relevant (by hand) stored in separate file on computer (2006 to 2008)

Association of Public Health Observatories (AHPO)

Single term 'migrant' yielded 41 results, 15 selected but c 5 relevant

National Library for Public Health (England) (3 refs selected)

Terms 'migrants and health'

Grey literature

Searching for Scottish work through phoning health board contacts using public health departments as a starting point, and including previous work carried out by Jo Morling and Dermot Gorman. Yielded c 38 reports

Informal searching on Google – papers and strategies stored in papers folder on computer

Terms 'migrants and health' Yield c 49 + 5 newspaper reports.

Also c 10 Newspaper reports from monitoring Glasgow Herald Guardian and Observer newspapers in Feb and March 2009 for the word 'migrant' in headlines.

ASSIA (March 2009)

Search Query #6 ((DE=("refugees" or "return refugees" or "asylum" or "immigration" or "bilingual immigrants" or "economic migration" or "illegal immigrants" or "illegal immigration" or "illegal migrant workers" or "immigrants" or "international labour migration" or "labour migration" or "migrant farm workers" or "migrant workers" or "migrants" or "migration" or "return migration" or "skilled migrant workers")) and(DE=("ambulatory health care" or "community health" or "public health" or "community health care" or "community health centres" or "community health services" or "community health workers" or "community mental health professionals" or "community mental health services" or "crossborder health care" or "dental health" or "family health service authorities" or "general practice" or "health" or "health and safety" or "health behaviour" or "health beliefs" or "health boards" or "health checks" or "health compliance" or "health compromising behaviour" or "health costs" or "health education" or "health equity" or "procedural justice" or "health hazards" or "health inequalities" or "health information" or "health information services" or "health education" or "health locus of control beliefs" or "health needs" or "health officers" or "health policy" or "health problems" or "health promotion" or "health risks" or "health services" or "health status" or "health visiting" or "health visitor client relationships" or "health visitors" or "health warnings" or "heart health" or "local health and social service centres" or "maternal health care" or "mental health" or "mental health care" or "mental health perspectives" or "mental health policy" or "mental health professionals" or "mental health promotion" or "mental health services" or "national health services" or "public health care" or "occupational health" or "occupational health and safety" or "occupational health hazards" or "occupational health services" or "oral health" or "oral health care" or "preventive health care" or "primary health care" or "primary mental health care" or "public health" or "community health" or "public health care" or "national health services" or "public health medicine" or "public health schools" or "regional health services" or "reproductive health" or "sexual health" or "sexual health services" or "spiritual health" or "student health services" or "student mental health services" or "ambulance services" or "care" or "care assistants" or "chiropody" or "community care" or "dentistry" or "first aid" or "fitness" or "hospitals" or "maternity services" or "minor injuries units" or "mixed treatment provision" or "ophthalmology services" or "physical fitness" or "social care" or "social services" or "welfare services")))) and (DE=("Europe" or "eastern Europe" or "channel

islands” or “Europea” or “Europea and wales” or “northern Europea” or “European” or “uk” or “wales”)) ([Copy Query](#))

111 Published Works results found in Multiple Databases 
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5 exp Public Health Dentistry/26227 Advanced DISPLAY

6 exp Public Health Practice/361224 Advanced DISPLAY

7 exp Occupational Health/18704 Advanced DISPLAY

8 exp Public Health/3929244 Advanced DISPLAY

9 exp Public Health Practice/361224 Advanced DISPLAY

10 exp Health Behavior/63474 Advanced DISPLAY

11 exp Mental Health Services/58536 Advanced DISPLAY

12 exp Dental Health Services/24808 Advanced DISPLAY

13 exp Minority Health/49 Advanced DISPLAY

14 exp Occupational Health Services/8618 Advanced DISPLAY

15exp Oral Health/7328 AdvancedDISPLAY
16exp Patient Acceptance of Health Care/109892 AdvancedDISPLAY
17exp Preventive Health Services/322031 AdvancedDISPLAY
18exp Health Promotion/34933 AdvancedDISPLAY
19exp Culture/ed, td, hi3164 AdvancedDISPLAY
20prenatal care/ or Pregnancy complications/ or Adult/ or Hospitals,
Maternity/ or Infant, Newborn/ or Maternal Health Services/3447846
AdvancedDISPLAY
21exp disease/100768 AdvancedDISPLAY
22illness.mp.220865 AdvancedDISPLAY
23health care.mp. or exp "Delivery of Health Care"/760649
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24exp Health Services/1178211 AdvancedDISPLAY
25exp Knowledge/ or exp Health Knowledge, Attitudes, Practice/46333
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26attitudes.mp. or exp Attitude/211266 AdvancedDISPLAY
27exp Behavior/850066 AdvancedDISPLAY
28exp Smoking/ or exp Smoking Cessation/96560 AdvancedDISPLAY
29exp Exercise/45252 AdvancedDISPLAY
30physical activity.mp.27520 AdvancedDISPLAY
31alcohol.mp.151771 AdvancedDISPLAY
32exp diet/145190 AdvancedDISPLAY
33nutrition.mp.108351 AdvancedDISPLAY
34coronary heart disease.mp. or exp Coronary Heart Disease/160197
AdvancedDISPLAY
35exp cardiovascular Diseases/1469149 AdvancedDISPLAY
36hd.mp.10718 AdvancedDISPLAY
37exp Heart Diseases/702282 AdvancedDISPLAY
38coronary artery disease.mp. or exp Coronary Arteriosclerosis/53937
AdvancedDISPLAY
39cad.mp.13111 AdvancedDISPLAY
40stroke.mp. or exp Cerebrovascular Accident/124702 AdvancedDISPLAY
41exp Angina Pectoris/ or angina.mp.51084 AdvancedDISPLAY
42exp Myocardial Infarction/119779 AdvancedDISPLAY
43heart attack.mp.2088 AdvancedDISPLAY
44exp Heart Arrest/24574 AdvancedDISPLAY
45heart failure.mp.93087 AdvancedDISPLAY

46exp Cerebrovascular disorders/ or cerebrovascular disease.mp.208049 AdvancedDISPLAY

47exp Atherosclerosis/7733 AdvancedDISPLAY

48exp Diabetes Mellitus, Type 2/ or exp Diabetes Mellitus/230966 AdvancedDISPLAY

49exp Neoplasms/1989928 AdvancedDISPLAY

50tumor.mp. or Neoplasms/ [mp=title, original title, abstract, name of substance word, subject heading word]1008010 AdvancedDISPLAY

51cancer.mp.651047 AdvancedDISPLAY

52injury.mp.509210 AdvancedDISPLAY

53exp Accidents/104034 AdvancedDISPLAY

54exp "Wounds and Injuries"/ or exp Accidental Falls/ or falls.mp.561160 AdvancedDISPLAY

55fractures.mp.126602 AdvancedDISPLAY

56exp Burns/40652 AdvancedDISPLAY

57exp poisoning/122590 AdvancedDISPLAY

58hemoglobinopath\$.mp.4238 AdvancedDISPLAY

59haemoglobinopath\$.mp.720 AdvancedDISPLAY

60exp Mental Health/14013 AdvancedDISPLAY

61exp Dental Caries/ or exp Oral Health/ or dental health.mp.44434 AdvancedDISPLAY

62exp transients/ and migrants.mp. [mp=title, original title, abstract, name of substance word, subject heading word]6595 AdvancedDISPLAY

63migrant*.mp.10560 AdvancedDISPLAY

64migrant worker*.mp.520 AdvancedDISPLAY

65transient*.mp.200904 AdvancedDISPLAY

66international worker*.mp.9 AdvancedDISPLAY

67eastern European.mp.855 AdvancedDISPLAY

68immigrant*.mp.10391 AdvancedDISPLAY

69exp "Emigration and Immigration"/20155 AdvancedDISPLAY

70exp reproductive health/2037 AdvancedDISPLAY

7162 or 63 or 64 or 65 or 66 or 67 or 68 or 69225912 AdvancedDISPLAY

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Appendix 2

From Finnish report ¹¹

Reasons for coming

Work,

Study,

Quota refugee,

Asylum seeker

 Awaiting decision

 Asylum seeker: granted asylum as refugee

 Asylum seeker: granted residence permit on grounds of a need for protection

 Asylum seekers who receive a negative decision but cannot be returned to country of origin for technical reasons

Returnees

 Returnees (Ingrian Finns)

Family reunification

Rights

The rights are categorised by:

Country of origin

 EU/EEA/Nordic

 Outwith EU

 Refugees from varying countries

Length of stay

 Period allowed to stay or after which have to register or get a permit

Type of permit

 Temporary, workers or various categories of residential

Right to employment

 Immediately, or after a certain period

Covered by Finnish social security system

Yes or conditions apply to particular groups

Entitled to health care

Differs by whether from within or out with the EU and different conditions for different groups

Appendix 3

Methodological challenges (for Corin) Integrating the 'two solitudes'

1. Epidemiological studies need to be able to be disaggregated by adequately described social and cultural variables to allow testing the impact of this social and cultural variation. Otherwise the intensive community studies can confirm the hypotheses from the large scale studies, but large scale studies cannot test hypotheses from intensive community studies.
2. National large scale data means little unless interpreted in local contexts, so a number of ways (not just units and levels) of disaggregating data are needed
3. Respecting the cultural meaning of a given concept in a given milieu. (EG too much social 'support' can be oppressive(for young women in a black community 'support' was associated with mental health symptoms, a feeling of belonging to a neighbourhood was more important for mental health than social support for the elderly)
4. How to compare intensive studies across cultures. Here Corin is saying you can do this by organising the data in higher level more universally applicable categories. You might need to do this to compare equity across cultural groups.

Appendix 4 : *Key studies from Scottish Grey Literature (available separately)*



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