Refugee integration:

Can research synthesis inform policy?

Feasibility study report

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1. Introduction

One of the biggest challenges facing policy makers in government is to take proper account of relevant research during the formulation of policies. A major problem for the potential users of research, be they policy makers, informed consumers, practitioners or other researchers, is that, when they have a particular question, they find it difficult or impossible to unearth all the relevant evidence, appraise its quality and decide what it means. Everyone therefore depends on good summaries of research to guide their thinking. Unfortunately, the efforts made by researchers to minimise bias and ensure accuracy in their research does not usually extend to the summaries they produce. Traditional reviews, consensus panels and expert opinion in healthcare and social science are not prepared in scientifically defensible ways, and there is good empirical evidence that the consequence is they are often inaccurate, out-of-date and potentially dangerous (Antman et al.,1992).

Research synthesis is a relatively new science that aims to assemble evidence about the benefits and harms of a variety of medical and social interventions using explicit, scientifically defensible methods (systematic reviews). The aim of this process, in contrast to traditional approaches to assessing research evidence, is to minimise bias, and to seek and appraise research studies in a systematic and standard way. The process aims to make the best estimate of the "truth" about what works and what is harmful, and highlights gaps in knowledge.

The UK has led the world in developing the application of the science of research synthesis in healthcare. In particular, the NHS Research and Development Programme has been the principal source of support for the international Cochrane Collaboration. Over the last ten years, the Cochrane Collaboration has produced over 1,000 systematic reviews relevant to healthcare, which are published electronically and updated as new evidence emerges (Cochrane Library, 2001). A sibling international collaboration - the Campbell Collaboration - is being developed to prepare and maintain systematic reviews of the effects of social and educational interventions, and the Home Office is already providing important support for the Campbell Crime and Justice Group.

The Home Office Refugee Integration Strategy, launched on 2 November 2000, sets out a clear framework to support the integration of refugees across the United Kingdom. The strategy aims to help refugees to develop their potential and contribute to the cultural and economic life of the country. In order to establish best practice in integration, the Home Office wishes to evaluate carefully the evidence underpinning various strategies promoting refugee integration. This study explores the feasibility of applying systematic reviews to government policies with refugees (terms of reference in Appendix 1).

2. Objectives

- To consider how research synthesis could be applied to policies for refugee integration.
- To assess potentially relevant research studies in relation to topic, volume and quality;
- To outline options for developing an evidence-base to refugee integration policies in the UK.

What is research synthesis?

Intervention research assesses the benefits and harms of interventions and policies. It needs to be reliable if the results are to be used to guide future practice. In many circumstances, there is often uncertainty in attributing a particular outcome to a particular intervention; for example, many illnesses are self limiting, and people will recover irrespective of what the doctor does; for many educational interventions, children will learn irrespective of the method of teaching used.

This means researchers have to be careful in attributing benefit (or harm) to a particular policy or action. To conduct meaningful research to help inform practice, researchers use comparison groups and experimental methods (randomised controlled trials and quasi randomised studies) to measure the relative benefits and harms of alternative interventions. These provide direct comparisons on intervention effects, and are a powerful method of determining the true effect and not one attributed to bias. In some circumstances, randomised controlled trials are inappropriate, and researchers may use cohort studies. However, the principles of the research remain the same - that it is carefully conducted, the design is appropriate to the question, and relevant comparison groups are used.

Research synthesis is a scientific process for identifying and assembling existing research around a particular topic. A *systematic review* is a review of a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant research, and to collect and analyse data from the studies that are included in the review. Traditional reviews, including textbooks, do not use scientific methods. In health there is now good empirical evidence that they can mislead, and draw conclusions that are not supported by the body of scientific knowledge.

The UK NHS Research and Development Programme made a commitment to making the health services evidence-based in 1992. The Programme established the Centre for Reviews and Dissemination (York), the Cochrane Centre (Oxford), and regional funds available to support people assimilating and using evidence. Research synthesis and evidence-based approaches are now mainstream in medicine, and this work has developed a capacity for high quality research synthesis in the UK, which is being applied to social interventions. The *Cochrane Collaboration*, mentioned earlier, aims to help people make well-informed decisions about healthcare by preparing, maintaining and ensuring access to systematic reviews of the benefits and risks of healthcare interventions. It has been highly successful in producing and updating reviews that are international in their scope and rigorous in their approach. A sister organisation, the *Campbell Collaboration*, is just being established and includes groups working in social welfare.

Have potentially relevant systematic reviews been done?

We looked for potentially relevant systematic reviews and through a network of contacts in social science, research synthesis and refugee studies; we browsed the Cochrane Library, examining

both the Cochrane Database of Systematic Reviews (Cochrane Reviews) and the Database of Reviews of Effectiveness (abstracts of other published systematic reviews).

In this process, we found no reviews directly addressing refugee integration policies, but found reviews that could be potentially relevant to the *health and welfare* of refugees; and a review of an intervention that could help with the *methods* of reviews in refugee integration.

Health and welfare

Psychological trauma

This is a recognised problem of refugees from war-torn areas, and debriefing is a recognised intervention that aims to reduce the long-term effects of the trauma. The abstract from a systematic review of this intervention (Table 1.1) shows no benefit of debriefing (defined as single session in people recently traumatised) with even a suggestion that the intervention worsens stress at one year.

Table 1.1 Abstract from a systematic review potentially relevant to refugees

Brief psychological interventions ("debriefing") for trauma-related symptoms and prevention of post traumatic stress disorder (Cochrane Review). Rose S, Wessely S, Bisson J. In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.
Objectives: To assess the effectiveness of brief psychological debriefing for the management of psychological distress after trauma, and the prevention of post traumatic stress disorder. **Search strategy**: Electronic searching of MEDLINE, EMBASE, PsychLit, PILOTS, Biosis, Pascal, Occ.Safety and Health, CDSR and the Trials Register of the depression, anxiety and neurosis group. Hand search of Journal of Traumatic Stress. Contact with leading researchers. **Selection criteria:** The inclusion criteria for all randomised studies was that they should focus on persons recently (one month or less) exposed to a traumatic event, should consist of a single session only, and that the intervention involve some form of emotional processing/ventilation by encouraging recollection/reworking of the traumatic event accompanied by normalisation of emotional reaction to the event. **Data collection and analysis**: Eight trials fulfilled the inclusion criteria. Quality was generally poor. Data from two trials could not be synthesised. **Main results:** Single session individual debriefing did not reduce psychological distress nor prevent the onset of post traumatic stress disorder (PTSD). Those who received the intervention showed no significant short term reduction (3 - 5 months) in the risk of PTSD (pooled odds ratio 1.0, 95% ci 0.6-1.8). At one year one trial reported that there was a significantly increased risk of PTSD in those receiving debriefing (odds ratio 2.9, 95% ci 1.1 - 7.5). The pooled odds ratio for the two trials with follow-ups just included unity (odds ratio 2.0, 95% ci 0.9 - 4.5). There was also no evidence that debriefing reduced general psychological morbidity, depression or anxiety. **Reviewers' conclusions:** There is no current evidence that psychological debriefing is a useful treatment for the prevention of post traumatic stress disorder after traumatic incidents. Compulsory debriefing of victims of trauma should cease.

Medical interventions

There are a series of reviews related to medical care that are potentially relevant to people coming to the UK from areas where other infectious diseases are endemic, including the effectiveness of preventive therapy for TB, and the effectiveness of nit combing on lice infestation (Smeija, 2001; Dodd, 2001, see appendix for summary).

Social interventions

Day care provision may be relevant to refugee integration, and an existing review examines research evidence for the effect of day care for pre-school children on educational, health and welfare outcomes for families and children (Zoritch et al., 2001). *Mass media to improve health service utilisation* is potentially relevant, and this has been reviewed (Grilli et al., 2001). *Case management* is a potentially useful intervention for refugees. It has been reviewed for people with severe mental disorders, and showed that it increased the number remaining in contact with services, but doubled the number admitted to hospital (Marshall et al., 2001), so it may be less valuable than previously thought. Abstracts of these three reviews are in Appendix 3.

Methods

Qualitative research

We know of one study piloting methods of incorporating qualitative research into an existing systematic review about the effects of healthcare (Noyes et al., Strategies to improve adherence to tuberculosis: integrating qualitative research. Project in progress).

What is integration?

Part of the process of evaluating integration policies is to map out what integration means, in terms of what it is trying to achieve, the activities carried out and how it is evaluated. Policy makers and researchers use 'integration' in many different contexts related to the process through which individuals and groups newly arrived in a territory interact with the people who are already there. However, the concept is rarely defined rigorously, leading one researcher to conclude that ''integration' is a chaotic concept: a word used by many but understood differently by most (Robinson, 1998).

The European Council on Refugees and Exiles considers integration to be a process of change that is:

- **Dynamic and two-way:** it places demands on both receiving societies and the individuals and/or the communities concerned. From a refugee perspective, integration requires a preparedness to adapt to the lifestyle of the host society without having to lose one's own cultural identity. From the point of view of the host society, it requires a willingness to adapt public institutions to changes in the population profile, accept refugees as part of the national community, and take action to facilitate access to resources and decision-making processes.

- **Long term**: from a psychological perspective, it often starts at the time of arrival in the country of final destination and is concluded when a refugee becomes an active member of that society from a legal, social, economic, educational and cultural perspective.

- **Multi-dimensional:** it relates both to the conditions for and actual participation in all aspects of the economic, social, cultural, civil and political life of the country of durable asylum as well as to refugees' own perception of acceptance by and membership in the host society (ECRE, 1999).

One commonly held view is that *integration needs to be policy driven*. This is implicit in the Refugee Council definition, where integration is described as 'a process which prevents or counteracts the social marginalisation of refugees, by removing legal, cultural and language obstacles and ensuring that refugees are empowered to make positive decisions on their future and benefit fully from available opportunities as per their abilities and aspirations (Refugee Council, 1997).

The broad emphasis of the term and the fact that people interpret what it means differently causes a problem when trying to evaluate it, or examine research that is sufficiently rigorous for it to provide new knowledge and truly inform policies. The natural way to tackle evaluating integration strategies is to divide them into the different areas of policy tackling integration: health, employment, housing, education and community development. Within each area, particular policies and programmes will have differing objectives, all contributing to the long- term goal of integration. Any evidence-based approach needs to address explicitly the potential for any policy or intervention to do harm, and this is important to consider.

Thus if we accept that integration is a goal and that what we seek to evaluate are particular programmes and policies seeking to achieve integration, then an evidence-based approach would first start by identifying the interventions, what the questions are within each intervention, and the types of research and outcomes that could reasonably be expected from research to answer these questions.

Although integration is 'individualised, contested and contextual' (Robinson, 1998), and its success depends on both objective and subjective criteria, any evaluation requires us to be able to define the intervention, what problem it is trying to address, the activities to achieve these and the measures of success. Any project or programme planning document is likely to contain this information, and they are useful for formulating systematic reviews around relevant questions. In Table 1.2, we give examples of these components for a variety of interventions in different sectors.

Table 1.2 Examples of potentially relevant interventions, their outcomes and any potentially harmful effects

Area	Intervention	Problem being addressed	Aims	Activities	Intermediate outcomes	Main outcomes	Potential harms
Health	Telephone helpline	Social isolation; reactive stress	Reduce stress; reduce suicide	Multilingual/refugee staffed helplines giving advice and referrals	Number of calls, number of referrals	Positive outcomes as judged by refugees at follow-up	Nil
Housing	Rent deposit guarantee schemes	No money to find own housing	To help refugees obtain private rented housing	NGO or government provide rent in advance or act as guarantor	Number of flats rented out	Number of long-term tenancies	Selected landlords participate
Employment	Mentoring scheme	Unemployment	To help refugees find employment	Advice and contacts from retired businessmen	Number of interviews, number of jobs	Job retention	Paternalistic attitudes
Community development	Community centres	Social isolation	Community development and interaction	Meeting space, social worker staff, childcare	Number of refugee/local users	Networks, interaction	Limited use of mainstream facilities
Education	Orientation courses	Access barriers to public services	Full use of entitlements	Courses about British institutions and authorities	Number of participants	Additional use of public services	Unrealistic expectations

3. Evidence available

The aim of the literature search was to locate primary studies and reports, published, unpublished and ongoing, which are relevant to intervention strategies for promoting refugee integration. We selected particular databases to search exhaustively to identify if relevant literature was available. This was not intended as a global and complete search of all intervention reports relevant to integration of refugees: which would be a much larger task.

We defined in advance our methods, including the type of studies we would include, our search strategy and the places we intended to search. Technical terms in the methods given below are defined in Appendix 2.

METHODS

Inclusion criteria

Types of study

Category 1. Systematic reviews of randomised trials or quasi-randomised trials.

Category 2. Experimental and quasi-experimental: Randomised and quasi randomised trials; Controlled before and after studies; Interrupted time series.

Category 3. Descriptive: Comparative studies, where a control or comparator population are described; cohort studies of more than 50 people followed up over six months or more.

Studies from any time period, published in any language and concerning any geographic location will be eligible.

Types of participant

Refugee: defined broadly as person seeking residence in another country for social or safety reasons. This will include people being processed for full refugee status, such as asylum seekers.

Voluntary migrants: defined as people who have moved to another country for personal, social or economic reasons.

Exclusions: Medical studies, where the primary problem is a clearly defined medical condition such as schizophrenia, and happens to have been conducted in refugees; studies of people in refugee camps.

Types of intervention

Interventions in the following categories were sought:

- health sector
- housing
- employment
- community development
- education (adult and children).

Types of outcome

Studies that provide some measure (quantitative or qualitative) of the following outcomes will be included:

Refugee perspective

- refugees as equal members of society
- health status
- perceptions of feeling comfortable within their community and maintaining their identity.

Society perspective

- economic participation in host country
- cultural participation in host country
- social participation with communities in the host country
- positive attitude towards refugees.

Search strategy for the identification of studies

We conducted initial searches to map out the field through screening of general subject database covering approximately 12,500 journals, and the British Education Index which covers journal and thesis literature relating to education and training.

We then conducted the following formal, recorded searches:

MEDLINE: The US National Library of Medicine's bibliographic database-primary coverage is medical literature, but it also contains references from psychology and the social sciences. It has a controlled vocabulary of Medical Subject Headings (MeSH) terms.

PAIS: Public Affairs Information Service is a bibliographic index to literature on public policy, social policy and the social sciences in general.

SIGLE: System for Information on Grey Literature in Europe. It gives access to reports, discussion and policy papers, some official publications and other grey literature.

Social Science Citation Index: Bibliographic information, abstracts of reports and cited references in 1,700 social science journals, and selections from 5,700 science and technology journals. It does not have a thesaurus (controlled vocabulary) and searching must be 'free text'. Boolean searches are limited to 50 terms.

Sociological Abstracts: A primary database of bibliographic information and abstracts in the social and behavioural sciences. It covers 2,600 journals, conference papers, books and theses.

Cochrane Controlled Trials Register: Published in the *Cochrane Library*. It is a bibliographic compilation of randomised controlled trials and controlled clinical trials in healthcare.

Websites included:

www.refugeenet.org	www.ceifo.su.se (Centre for Research in International Migration and Ethnic Relations, Sweden)
www.unhcr.ch	
www.freevillage.org	www.efms.uni-bamberg.de (European Forum for Migration Studies, Germany)
www.ecre.org	http://cicnet.ingenia.com/english/research/ (the Metropolis Project, Canada).

University of Oxford Refugee Studies Centre, Reference Library: Collection of 34,500 documents including books, unpublished reports, articles from academic journals, government reports, reports of non-government and international aid organisations, and grey literature.

Hand searching journals: Journal of International Migration and Integration 2000 - 2001; International Migration Review 1990 - 2001; Journal of Ethnic and Migration Studies 1990 - 2001(formerly New Community 1990 - 1998).

Search strategies using a combination of controlled vocabulary and free text terms were developed for MEDLINE and Social Science Citation Index. These strategies are contained in the Search Logs (Appendix 4). Searches of the BEI, PAIS and SIGLE databases used exploratory strategies with fewer terms. In searching the collection of the Oxford Refugee Studies Centre, a combination of country and subject classification was used. The British Refugee Council Classification Scheme (RSCs) lists 36 terms under the heading of 'Adaptation', which included integration, psychology, cultural orientation, linguistic adaptation, education, economic adaptation and receiving country attitudes. These terms were applied to the RSCs country collections on Western Europe, UK, Germany, The Netherlands, Sweden, Canada and the US.

Data analysis

Abstracts from the initial searches were screened by two investigators (Y.S. and M.F.) for potentially eligible trials, and full text versions of these were sought. Inclusion criteria were applied by the two investigators. Information from the studies presented was assessed and summarised with respect to study design, participants, study location, category of intervention, interventions and outcomes.

Studies were stratified into those in refugees and those in voluntary migrants.

RESULTS

Studies identified

The literature search resulted in the identification of approximately 4,480 reports (Table 2.1). Of these, seven were included; seven met the intervention and outcome criteria, but not study design, 118 were excluded following full text retrieval, and 27 are awaiting clarification from full text.

Table 2.1 Results of search strategy analysis and document retrieval

Search source	Year	Results of search	Included	Excluded - meets intervention and outcome criteria, but not study design	Excluded following full text retrieval	Awaiting clarification from full text
SSCI	2000 - 1	644	1	2	12	13
	1999	348	0	1	1	0
	1998	359	1	0	2	2
	1997	321	1	1	3	4
	1996	335	1	1	6	2
	1995	272	0	0	4	0
	1994	227	0	0	1	1
	1993	190	0	0	1	1
	1990 - 2	229	0	1	1	0
	1981 - 89	22	0	0	0	0
MEDLINE	1966 - 2001	56	2[1]	3[2]	1	4
BEI	1976 - 2001	449	1	1	14	0
PAIS	1972 - 2001	354	0	0	4	0
SIGLE	1980 - 2000	39	0	0	3	0
Cochrane Library	2001	4	1	1	0	0
Article First	1990 - 2001	317	0	0	13	0
RSC Cardbox Catalogue	1980 - 2001	40	0	0	5	0
Grey literature	1980 - 2001	~250	0	0	22	0
Websites	29 May 2001	7	0	0	7	0
Journals hand searched		3	0	0	3	0
Books		15	0	0	15	0

[1]One of these studies was a duplicate with the Cochrane Collaboration, and one with the SSCI.

[2]Two of these three studies were duplicates with the SSCI, and one with the Cochrane Collaboration.

Description of studies

Data extracted from studies that met the inclusion criteria are in Table 2.2. Table 2.3 outlines studies with interventions and outcomes that met the inclusion criteria, but the study design did not. They therefore contain information about interventions that may be of interest, but where it would be difficult to assess whether they actually provide evidence about benefit or harms.

Within the seven studies included, the interventions looked at were in health (2 studies), education (3 studies), health/community development (1) and employment (1). Three were quasi-experimental, and the rest observational.

Of the seven studies included, two studied refugees (Pfeffer, 1997; Fox et al., 1998), whilst the others included economic migrants that could not be distinguished from refugees. Five were set in the US, and two in Holland.

All the interventions were complex, that is, they consisted of multiple actions. Two studies had specific, easily reproducible interventions (Hornberger et al: simultaneous interpreters; Pfeffer: public income assistance), whilst the others had a larger array of inputs.

The outcomes were also varied and complex- for example in Litrownik where the outcome was of perceived parent-child communication following a number of different interventions.

Table 2.2 describes the studies we retrieved, where the intervention and some of the outcomes met the inclusion criteria, but were either narrative descriptions of the interventions (with no reliable evidence about benefit or harms). However, such literature can help in highlighting potentially useful interventions and approaches that might be worthy of a more rigorous evaluation.

Table 2.2 Studies meeting the inclusion criteria

Study	Study design	Participants	Study location	Category of intervention	Interventions	Outcomes
Van Tuijl 2001	Quasi-experimental pre-post test with control group (category 3)	Turkish and Moroccan children	Holland	Education	Home-based education programme for pre-schoolers with training for mothers	Cognitive development, mother-tongue and Dutch language development
Altena et al. 1982	Time series with comparison group (category 2)	Turkish and Moroccan children	Holland	Education	Attending transitional bilingual school	Oral and written proficiency in mother tongue and second language
Norwood et al. 1997	Two group, non-equivalent comparison group design (category 3)	African-American parents	Houston	Education	Parent-involvement programme included parenting skills, developing academic readiness of children, helping establish a sense of community	Children maths and reading scores
Fox et al. 1997	Observational comparative study (category 3)	Vietnamese and Cambodian women	Chicago	Education, Health, Community Development	Home visit interventions by school nurses and bilingual teachers	Problems solved, health, training in utilisation of community resources
Pfeffer 1997	Observational comparative study (category 3)	Cambodian refugees and African-Americans	Philadelphia	Employment	Public assistance income	Employment
Litrownik et al. 2000	Cluster randomised pre-post control group study (category 2)	Hispanic migrants	San Diego	Health	Culturally based family - sensitive intervention with bilingual staff that aimed to promote parent-child communication, and thus reduce adolescent tobacco and alcohol use	Perceived parent-child communication
Hornberger 1996	Randomised control study (category 2)	Spanish speaking post-natal women	North Carolina	Health	Remote simultaneous interpreter service (experimental) vs. proximate-consecutive interpretation (control)	Physician utterances and mother utterances, preference for location of interpreter

Table 2.3 Examples of studies excluded studies that may be useful in generating hypotheses or by illustrating potentially useful interventions†

Study	Study design	Participants	Study Location	Category of intervention	Interventions	Outcomes
Knox 1996	Narrative description of the intervention and participants	South East Asian refugees, at risk families	San Francisco	Community development, health, education	Home-based child enrichment and family support programme. Ethnically matched paraprofessionals. Translation service. Services tailored to the needs of the client	Immunisation, nutrition, encouraging child's play, accidents at home, contacts with family. 42 children reported.
Peters 1998	Narrative description of the intervention and its implementation	Professional, highly-skilled refugees, asylum seekers	London	Education, employment	Accreditation of prior (Experiential) Learning Programme. Professional and CV advice	Certificate of course attendance. Self-esteem
Taler 1998	Narrative description of the intervention	Female immigrants	Haifa, Israel	Education, employment, community development	Workshop on job-seeking skills, self-help group, establishment of social support network	Employment (including in original profession), attending retraining course
Bernstein and Shuval 1998	Cohort, natural history. No intervention	Immigrant physicians from former USSR	Israel	Employment	Preparatory course for professional licensure examinations	General Practice License. Employment (including in original specialty)
Watkins et al. 1990	Before and after evaluation. No comparison group	Pregnant farm workers and children, majority Mexican.	North Carolina	Health	Bilingual multidisciplinary team of health professionals collaborating with a migrant health centre. Outreach work, co-ordination of maternal and child health services. Transportation services, advocacy.	Health, pre-natal care visits, birth weight, immunisations, growth measurements, dietary assessments (including breastfeeding).
Kennedy et al. 1999	Narrative description	Refugee	Colorado	Health	Comprehensive health screening programme for newly arrived refugees	Health assessments, immunisations, treatment for parasites, identification and treatment of significant health conditions
Muennig et al. 1999	Cost-effectiveness analysis	Refugees	New York	Health	Evaluation of three different approaches to managing intestinal helminths in migrants	Imputed values for illness, cure, mortality, adverse effects and costs

† Studies examined that met the "intervention" and "outcome" criteria, but excluded on the basis of study design

DISCUSSION

Limitations of our study

This search, as part of a feasibility study, was limited to particular databases and sources. It is not an exhaustive search of the full global literature on refugee integration, and only English language literature was reviewed. The search may have missed other studies, especially those reported in books, and the hand searching done only included refugee material, rather than all migration.

We also had problems classifying some studies. Some interventions that aim to improve health may not be explicitly related to integration but have an impact to access to public services. For example, the incentives for health screening, and in education those for special needs children.

We also excluded cost studies. Comparative cost is clearly an important consideration in making decisions about competing interventions, and interventions that do not work are expensive, irrespective of their actual monetary cost. Establishing something of benefit is the first step in any evaluation of cost-effectiveness. Cost also varies with where the intervention is being delivered, and can vary greatly within and between countries. Thus one approach to evaluating cost-effectiveness starts by analysing the often generalisable effects through systematic reviews of reliable research, and then applying these results to a particular setting or system.

Findings

There is a large volume of published and unpublished material about refugees, policies related to refugees, and how integration might be achieved. The material covers health, education, community development, employment and housing. However, the material is not easily accessible, and only a few studies met our inclusion criteria. We found no large-scale longitudinal cohort studies looking at any of the important interventions or outcomes in any of the sectors. This is consistent with independent searches done in Sweden by a researcher setting up the Campbell Collaboration Social Welfare Group (Soyden, 1999; Soyden pers. Com.). Our findings raise several questions.

Question 1. Were our inclusion criteria too strict?

Our starting point was the standards developed for systematic reviews as part of the Cochrane and Campbell Collaborations, which we then made broader by including descriptive and cohort studies. We still excluded case series, case reports or simple descriptions of intervention studies, because it is clear that the level of selection bias will mean that it is difficult to interpret any “evidence” so obtained.

Is it worthwhile using systematic methods to summarise lower quality research and evaluation studies? Certainly if these data are to be summarised then systematic methods are more appropriate than an ad hoc approach; however, it is not worthwhile expending large quantities of energy and money summarising poor quality research. It may also not be worthwhile systematically summarising project evaluation studies that have been designed for local decision-making, as they are unlikely to be designed and presented sufficiently rigorously to allow critical evaluation with findings that are applicable in other settings.

It may be that the literature in this field is limited as it may not have been a priority research topic for policy makers or research funders; and people working in the field may not be experienced in randomised and quasi-randomised designs to evaluate interventions. Evaluating interventions in refugee integration is not an easy task and needs a team of people with good methodological

research skills and staff experienced in working with refugees; refugee representation in the research is essential, as their perspective is central to the questions being asked.

Question 2. Should we include qualitative research?

It is often stated that qualitative research is important in formal evaluations of the benefits and harms of interventions, but exactly how is not clear. There are no methods for doing this to date, and no good examples of where it has been done.

Whilst there is a wealth of qualitative studies, observational studies and project reports in refugee integration, experience suggests these are rarely useful in providing research findings that give direction to policies and practice in other settings. They may provide ideas, highlight issues, generate hypotheses and explore important outcomes.

Qualitative research may also help to assess the views of refugees, and delineate some of the complex outcomes such as perceptions of feeling comfortable, which are not easily measured.

Policy research often draws attention to structural factors (e.g. shortages in the housing market). Interventions need to take these factors as a 'given', but policy research can provide arguments for long-term structural changes, such as decreasing reliance on hard-to-let stock for housing asylum seekers.

Thus qualitative research clearly has a role in research in refugee integration, but it is unclear how systematic reviews of qualitative research can contribute to systematic reviews of the benefits and harms of various integration strategies.

Question 3. Should we have included other socially excluded groups?

We limited our search to refugees and migrants, but it is highly likely that intervention research in groups marginalised economically or culturally for other reasons (social exclusion research) will be relevant to refugees. For example, research on helping deaf people find work or housing, or affirmative action policies in the US for the African-American, population may be relevant. An existing review of improving adherence to treatment for tuberculosis, for example, is mainly in marginalised populations, and has peer support and educational programmes that help overcome social exclusion (Volmink and Garner, 2001).

Question 4. Is there value in systematic reviews when literature is sparse?

Systematic reviews start with a protocol that justifies the rationale for the review, and the thinking behind the intervention. If the question is worth asking, then ask it, whether the research evidence is available or not. For example, a protocol for a review on whether scaring delinquents prevents reoffending ("scared straight" programme) has recently been published (Petrosino et al., 2001), without knowledge of whether any trials exist in this area.

Some reviews may indeed identify no relevant studies. For example, a study examining the public health policy of screening for toxoplasmosis during pregnancy was published in the British Medical Journal, but contains no trials that meet the inclusion criteria. This review was used in policy formulation in Norway, and is an example of a systematic review highlighting a gap in our knowledge (Wallen et al., 1999; Wallen 2001). Thus, reviews in areas where literature is sparse are often worth doing as they highlight uncertainty.

In terms of future research, a systematic review identifies gaps and helps define appropriate study designs and outcomes to measure. This process may also help thinking in the area, so that the outcomes identified in the systematic review as relevant for evaluating the intervention may be useful in local programme evaluation.

4. Strategic options

Integration of refugees is important; refugees contribute to the economy, their management is of interest to the public, and various programmes and policies for integration have substantial cost implications for government. Thus it seems sensible that good research underpins some of the choices made.

Our initial searches have not identified a hidden wealth of literature that will suddenly inform policy, but they have shown that there are some potentially relevant studies. We need to be realistic: systematic reviews are unlikely to suddenly identify new strategies that can be implemented immediately.

However, there is a value in preparing systematic reviews of the available evidence as part of an integrated programme of improving the evidence-base for social policy. This is because systematic reviews will:

- find, appraise and summarise information that is potentially relevant to information needs. This will help make areas of uncertainty over policies and practice explicit
- help define the research agenda, and often spark good quality research in the areas that are currently poorly served by research
- help define the issues around policies, by forcing people to consider the benefits and harms of interventions, and exactly what outcomes they are trying to achieve. This can lead to better designed projects, and better monitoring and evaluation.

We therefore encourage the Home Office to establish a process for preparing and maintaining relevant systematic reviews in refugee integration, and ensure this is embedded in an emerging programme of research, evaluation and critical appraisal of policies.

Steps to take

Include systematic reviews as part of social science policy research strategy

If the aim is to help ensure government policies are based on reliable evidence, then preparing and maintaining systematic reviews could become part of the research strategy for social policy.

Allocate funds for research and evaluation

Preparing systematic reviews takes time and costs between £20,000 and, £100,000 depending on the size of the task. Conducting good quality research costs money, and it is unlikely that agencies that are currently implementing programmes have the resources or the expertise to conduct reliable research. We believe Research Councils - particularly the Economic and Social Research Council - are a potential channel to the expertise required.

Ensure any research strategy has a consumer and a community voice

Integration is a complex topic, and it is important that any research strategy and particular research arising from (systematic reviews or controlled trials) have mechanisms to ensure that people representing the views of refugees and host communities are involved in the process.

Identify people with the content and methods skills to carry out the work

Systematic reviews need good policy and consumer led questions, and people that know how to answer them. Clear formulation of the question and the methods are the crucial aspects of any systematic review, and it is important that those doing the reviews do not have some vested interest in their outcome. There are many good people who could draw such a group together, for example:

- centres of excellence: such as the MRC Social and Public Health Sciences Unit in Glasgow, the NHS Centre for Reviews and Dissemination in York, the Refugees Study Centre in Oxford, and the Centre for the Analysis of Social Exclusion (CASE) at the London School of Economics

- emerging collaborations: such as the Campbell Collaborative Review Group on Social Work and Ethnicity (Haluk Soydan, Stockholm), emerging under the aegis of the Campbell Social Welfare Coordinating Group (Mark Petticrew, Glasgow; Geraldine MacDonald, Bristol).

The Centre for Policy and Management in the Cabinet Office is linked to the Campbell Collaboration through Dr Phil Davies, Director for Policy and Evaluation, who is on the Campbell Steering Committee.

Map out the relevant interventions

Using existing literature and expert opinion, map out potentially useful interventions that have been used to date.

Consider the scope of reviews in this area

It is important to consider, early in the commissioning process, the role of research into ethnic groups, and deprived groups in general, as lessons from reliable research in these groups may well help inform policies in refugees. Reviews should be international in their scope, and not constrained by geography or language.

Consider potentially relevant methodological research

Integration is a complex outcome, and any assessment of interventions is likely to need some good quality qualitative research delineating relevant outcomes, and considering this in the context of intervention trials. It is possible that scientifically sound qualitative research may be part of evaluating an intervention strategy.

Start outlining priority questions as part of the research strategy

It is helpful to start outlining the questions that are relevant to current policies. Here are examples of possible questions that systematic reviews and primary studies could address:

Intervention	Question
Orientation courses	Do they improve integration of refugees?
Trial of fast-track work permit	Does rapid processing of work permit help long term integration?
Community extension workers speaking local language	Do community support personnel who speak the same language improve integration?
Orientation of teachers combined with special teaching programmes about world citizenship and global conflict	Does sensitisation of children in schools around issues of migration, conflict and ethnicity improve integration of refugee children?

Start considering factors that may influence intervention effectiveness

It is certain that a variety of factors will influence the effectiveness of interventions. Generally in intervention research we assume people respond in similar ways unless there are obvious reasons that they may not, and these factors are important to consider early, for example recent exposure to severe stress from conflict zones, and arriving alone with no contacts. These need to be considered in evaluating existing research and judging its applicability. Other factors that could influence effectiveness include:

- factors in society (local community and whole society), such as racial prejudice, employment rates etc.
- the initial period of arrival into the host country and how this was perceived and experienced. For example, comparing those that were held in a detention centre versus, those that were not.

Summary

1. Systematic reviews of interventions aiming for refugee integration are a sensible component of any research strategy that aims for a better evidence base underpinning government policies.
2. Although the number of existing carefully controlled studies is limited, reviews should be constrained to methodologically appropriate research assessing benefits and harms. There is a good argument for extending the scope of the reviews to include migrants and deprived groups.
3. The process requires people and groups skilled in research synthesis, working with specialists in refugee research, and policy makers. The emerging Campbell Collaboration may provide a vehicle for taking these reviews forward.

5. References

Background

Antman EM, Lau J, Kupelnick B, Mosteller F and Chalmers TC. 1992 A comparison of results of meta-analyses of randomized control trials and recommendations of clinical experts. Treatments for myocardial infarction [see comments]. *JAMA.* 1992;268:240-8.

Audit Commission for Local Authorities and the NHS in England and Wales. *Another country: implementing dispersal under the immigration and asylum act*. June 2000.

Bauböck R. *The Integration of Immigrants*. Council of Europe doc. CDMG (94) 25 E. October 1994.

Briggs CJ, Capdegelle P and Garner P. *Strategies for integrating primary health services: effects on process of care, costs and patient outcomes* (Cochrane Review). In: The Cochrane Library (forthcoming). Oxford: Update Software.

Briggs CJ and Capdegelle P. *Assessing integration*. Liverpool: Effective Health Care Alliance Programme, 2001. Report for the World Health Organization.

Carey-Wood J, Duke K, Karn V and Marshall, T. *Refugee Settlement in Britain.* Home Office Research Study 141. HMSO London; 1994.

Carey-Wood, J. *Meeting Refugee Needs in Britain: The Role of Refugee-Specific Initiatives*. HMSO London; 1997.

Clarke M and Oxman AD, editors. Cochrane Reviewers Handbook 4.1.2 [updated March 2001]. In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software. Updated quarterly.

Council of Europe Specialist Group on Integration and Community Relations. Round Tables on Identity and Integration (Strasbourg, 4/5 June and 16/17 October 1997). *Working Papers and Summary Conclusions*. February 1998.

Dodd CS. Interventions for treating headlice (Cochrane Review). In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

ECRE. *Position on the integration of refugees in Europe*. September 1999.

Petrosino A, Turpin-Petrosino C and Buehler J. "Scared Straight" and other prison tour programmes for preventing juvenile delinquency (Protocol for a Cochrane Review). In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Peyron F, Wallon M, Liou C and Garner P. Treatments for toxoplasmosis in pregnancy (Cochrane Review). In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Refugee Action. *Refugees in the North West of England* 1997.

Refugee Council. *An agenda for action - challenges for refugee settlement in the UK*. November 1997.

Refugee Council. *The development of a refugee settlement policy in the UK*. Working Paper No. 1. July 1997.

Robinson V and Coleman C. *Lessons learned? A critical review of the government programme to resettle Bosnian quota refugees in the UK*. New York: Center for Migration Studies; 2000.

Robinson V. *Defining and measuring successful refugee integration*. In: ECRE. Report of conference on Integration of Refugees in Europe, Antwerp 12 - 14 November 1998.

Rose S, Wessely S and Bisson J. *Brief psychological interventions ("debriefing") for trauma-related symptoms and prevention of post-traumatic stress disorder* (Cochrane Review). In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Smieja MJ, Marchetti CA, Cook DJ and Smaill FM. Isoniazid for preventing tuberculosis in non-HIV infected persons (Cochrane Review). In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Soyden H. Socialt arbete med etniska minoriteter. En litteraturöversikt [social work with ethnic minorities. a literature review], Stockholm, Liber, 1999.

Volmink J and Garner P. Interventions for promoting adherence to tuberculosis management (Cochrane Review). In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Wallon M, Liou C, Garner P and Peyron F. Toxoplasmosis: What is the evidence that treatment in pregnancy prevents congenital disease? *British Medical Journal* 1999; 318: 1511-3.

Studies meeting the criteria

Altena N and Appel R. Mother Tongue Teaching and the acquisition of Dutch by Turkish and Moroccan Immigrant Workers' Children. *Journal of Multilingual and Multicultural Development* 1982; 3(4):315-322.

Fox PG, Cowell JM, Montgomery AC and Willgerodt MA. Southeast Asian refugee women and depression: a nursing intervention. *International Journal of Psychiatric Nursing Research* 1998; 4(1):423-32.

Hornberger JC, Gibson CD Jr., Wood W, Dequeldre C, Corso I, Palla B and Bloch DA. Eliminating language barriers for non-English-speaking patients. *Medical Care*. 1996; 34(8):845-56.

Litrownik AJ, Elder JP, Campbell NR, Ayala GX, Slymen DJ, Parra-Medina D, Zavala FB and Lovato CY. Evaluation of a tobacco and alcohol use prevention programme for Hispanic migrant adolescents: promoting the protective factor of parent-child communication. *Preventive Medicine* 2000; 31(2 Pt 1):124-33.

Norwood PM, Atkinson SE, Tellez K and Saldana DC. Contextualising Parent Education Programs in Urban Schools: The Impact on Minority Parents on Students*. Urban Education* 1997; 32(3):411-432.

Pfeffer MJ. Work versus welfare in the ethnic transformation of a Philadelphia Labor Market. *Social Science Quarterly* 1997; 78(2):453-471.

Van Tuijl C, Leseman PPM and Rispens J. Efficacy of an intensive home-base educational intervention programme for 4 to 6-year-old ethnic minority children in the Netherlands. *International Journal of Behavioural Development* 2001; 25(2):148-159.

Studies meeting the intervention and inclusion criteria but not study design

Bernstein JH and Shuval JT. The occupational integration of former Soviet physicians in Israel. *Social Science & Medicine* 1998; 47(6):809-19.

Kennedy J, Seymour DJ and Hummel BJ. A Comprehensive Refugee Health Screening Programme. *Public Health Reports* 1999; 114:469-477.

Knox J. Homebased Services for Southeast Asian Refugee Children: A Process and Formative Evaluation. *Children and Youth Services Review* 1996; 18(6):553-578.

Muennig P, Pallin D, Sell RL and Chan MS. The cost effectiveness of strategies for the treatment of intestinal parasites in immigrants*. New England Journal of Medicine* 1999; 340(10): 773-9.

Peters H. Moving Forward: Working Towards AP(E)L With Refugees and Asylum Seekers. *Innovations in Education and Training International* 1998; 35(1):66-71.

Taler Y. Integration into work of unemployed new immigrant women from single parent families. *International Journal of Rehabilitation Research* 1998; 21:195-209.

Watkins EL, Larson K, Harlan C and Young S. A model programme for providing health services for migrant farmworker mothers and children. *Public Health Reports* 1990; 105(6):567-75.

6. Appendices

Appendix 1. Terms of reference

The aim of this project is to investigate the feasibility of applying methodology of systematic reviews to the literature of intervention of refugee integration. Key questions to address are:

- Is there sufficient research evidence?
- Is it of suitable quality and how can the validity of the methodology used to evaluate integration interventions be assessed?
- How to identify evidence (outcomes and cost-effectiveness)?
- How to access evidence?
- How to assess the quality of evidence?
- How to integrate and synthesise the evidence in a non biased way?

Appendix 2. Definitions

Campbell Collaboration	The Campbell Collaboration is an emerging international effort that aims to help people make well-informed decisions by preparing, maintaining and promoting access to systematic reviews of studies on the effects of social and educational policies and practices.
Cochrane Collaboration	An international organisation that aims to help people make well informed decisions about healthcare by preparing, maintaining and promoting the accessibility of systematic reviews of the effects of healthcare interventions
Cohort study	An observational study in which a defined group of people (the cohort) are followed up over time. The outcomes of people in subsets of the cohort are compared to examine who were exposed or not exposed to a particular intervention or other factor of interest.
Control group or comparator population	A group in the analysis against which the intervention group are compared. In a randomised controlled trial, participants are allocated by change to either control (existing policies or treatments) versus experimental group (allocated to new policy or treatment).
Controlled before and after	A design where there is contemporaneous data collection before and after the intervention and an appropriate control site or activity.
Interrupted time series	A design where there is a clearly defined point in time when the intervention occurred and at least three data points before and three after the intervention.
Observational study	A study in which nature is allowed to take its course. Changes or differences in one characteristic (e.g., whether people received the intervention) are studied in relation to changes or differences in other characteristics (such as whether they survived). Greater risk of selection bias than in RCTs.
Quasi randomised allocation	Method of allocation that is not truly random. For example, by date of birth, day of the week, or order people are included in the study.
Quasi randomised controlled trial	A trial using quasi randomised methods of allocating people to different forms of care.
Randomised controlled trial	An experiment in which investigators randomly allocate eligible people into intervention groups to receive or not to receive one or more interventions that are being compared. The results are assessed by comparing outcomes in the treatment and control groups.

Appendix 3. Relevant systematic reviews

Dodd CS. Interventions for treating headlice (Cochrane Review). In: The Cochrane Library, Issue 2, 2002. Oxford: Update Software.
Background: Infection with head lice is a widespread condition in developed and developing countries. Infection occurs most commonly in children, but also affects adults. If left untreated the condition can become intensely irritating and skin infections may occur if the bites are scratched. **Objectives:** The aim of this review was to assess the effects of interventions for head lice. **Search strategy:** Trials register of The Cochrane Infectious Diseases Group; Medline; Embase; Science Citation Index; Biosis and Toxline; reference lists of relevant articles; pharmaceutical companies producing pediculicides (published and unpublished trials); UK and US Regulatory Authorities. **Selection criteria:** Randomised trials (published and unpublished) or trials using alternate allocation were sought which compared pediculicides with the same and different formulations of other pediculicides, and pediculicides with physical methods. **Data collection and analysis:** Of the 71 identified studies, only four met the inclusion criteria. Two reviewers independently assessed trial quality. One reviewer extracted the data. **Main results:** We found no evidence that any one pediculicide has greater effect than another. The two studies comparing malathion and permethrin with their respective vehicles showed a higher cure rate for the active ingredient than the vehicle. Another study comparing synergised pyrethrins with permethrin showed their effects to be equivalent. A comparative trial of malathion lotion vs combing, showed combing to be ineffective for the curative treatment of head lice infection. Adverse effects were reported in a number of trials and were all minor, although reporting quality varied between trials. **Reviewers' conclusions:** Permethrin, synergised pyrethrin and malathion were effective in the treatment of head lice. However, the emergence of drug resistance since these trials were conducted means there is no direct contemporary evidence of the comparative effectiveness of these products. The 'best' choice will now depend on local resistance patterns. Physical treatment methods(BugBusting) were shown ot be ineffective to treat head lice. No evidence exists regarding other chemical control methods such as the use of herbal treatments, when used in the curative treatment of head lice. Future trials should take into account the methodological recommendations that arise from this review.

Smieja MJ, Marchetti CA, Cook DJ, Smaill FM. Isoniazid for preventing tuberculosis in non-HIV infected persons (Cochrane Review). In: The Cochrane Library, Issue 2, 2002. Oxford: Update Software.

Background: Although isoniazid (INH) is commonly used for treating tuberculosis (TB), it is also effective as preventive therapy.

Objectives: The objective of this review was to estimate the effect of 6 and 12 month courses of INH for preventing TB in HIV-negative people at increased risk of developing active TB.

Search strategy: We searched the Cochrane Infectious Diseases Group trials register, the Cochrane Controlled Trials Register, Medline, Embase and reference lists of articles. We hand-searched Science Citation Index and Index Medicus.

Selection criteria: Randomised trials of INH preventive therapy for 6 months or more compared with placebo. Follow-up for a minimum of 2 years. Trials enrolling patients with current or previously treated active TB, or with known HIV infection, were excluded. Criteria were applied by two reviewers independently.

Data collection and analysis: Trial quality was assessed by two reviewers independently, and data extracted by one reviewer using a standardized extraction form.

Main results: Eleven trials involving 73,375 patients were included. Trials were generally of high quality. Treatment with INH resulted in a relative risk (RR) of developing active TB of 0.40, (95% confidence interval {CI} 0.31 to 0.52), over two years or longer. There was no significant difference between 6 and 12 month courses (RR of 0.44, 95% CI 0.27 to 0.73 for six months, and 0.38, 95% CI 0.28 to 0.50 for 12 months). Preventive therapy reduced deaths from TB, but this effect was not seen for all cause mortality. INH was associated with hepatotoxicity in 0.36% of people on 6 months treatment and in 0.52% of people treated for 12 months.

Reviewers' conclusions: Isoniazid is effective for the prevention of active TB in diverse at-risk patients, and six and 12 month regimens have a similar effect.

Mass media interventions: effects on health services utilisation (Cochrane Review). Grilli R, Freemantle N, Minozzi S, Domenighetti G and Finer D. The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Background: The mass media frequently cover health related topics, are the leading source of information about important health issues, and are targeted by those who aim to influence the behaviour of health professionals and patients.

Objectives: To assess the effects of mass media on the utilisation of health services.

Search strategy: We searched the Cochrane Effective Practice and Organisation of Care Group specialised register, MEDLINE, EMBASE, Eric, PsycLit, and reference lists of articles. We hand searched the journals Communication Research (February 1987 to August 1996), European Journal of Communication (1986 to 1994), Journal of Communication (winter 1986 to summer 1996), Communication Theory (February 1991 to August 1996), Critical Studies in Mass Communication (March 1984 to March 1995) and Journalism Quarterly (1986 to summer 1996).

Selection criteria: Randomised trials, controlled clinical trials, controlled before-and-after studies and interrupted time series analyses of mass media interventions. The participants were healthcare professionals, patients and the general public.

Data collection and analysis: Two reviewers independently extracted data and assessed study quality.

Main results: Seventeen studies were included. All used interrupted time series designs. Fourteen evaluated the impact of formal mass media campaigns, and three of media coverage of health related issues. The overall methodological quality was variable. Six studies did not perform any statistical analysis, and seven used inappropriate statistical tests (i.e. not taking into account the effect of time trend). All of the studies apart from one concluded that mass media was effective. These positive findings were confirmed by our re-analysis in seven studies. The direction of effect was consistent across studies towards the expected change. The pooled effect sizes for studies assessing the impact of mass media on similar aspects of care revealed an effect upon the utilisation of health services that could not be explained by chance alone, ranging from -1.96 (95%CI -1.19 to -2.73) for campaigns promoting immunisation programmes, to -1.12 (95%CI -0.49 to -2.36) for those concerning cancer screening.

Reviewers' conclusions: Despite the limited information about key aspects of mass media interventions and the poor quality of the available primary research, there is evidence that these channels of communication may have an important role in influencing the use of healthcare interventions. Those engaged in promoting better uptake of research information in clinical practice should consider mass media as one of the tools that may encourage the use of effective services and discourage those of unproven effectiveness.

Day-care for pre-school children (Cochrane Review). Zoritch B, Roberts I and Oakley A. In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Background: The debate about how, where and by whom young children should be looked after is one which has occupied much social policy and media attention in recent years. Mothers undertake most of the care of young children. Internationally, out-of-home day-care provision ranges widely. These different levels of provision are not simply a response to different levels of demand for day-care, but reflect cultural and economic interests concerning the welfare of children, the need to promote mothers' participation in paid work, and the importance of socialising children into society's values. At a time when a decline in family values is held responsible for a range of social problems, the day-care debate has a special prominence.

Objectives: To quantify the effects of out-of-home day-care for preschool children on educational, health and welfare outcomes for children and their families.

Search strategy: Randomised controlled trials of day-care for pre-school children were identified using electronic databases, hand searches of relevant literature and contact with authors.

Selection criteria: Studies were included in the review if the intervention involved the provision of non-parental day-care for children under five years of age, and the evaluation design was that of a randomised or quasi-randomised controlled trial.

Data collection and analysis: A total of eight trials were identified after examining 920 abstracts and 19 books. The trials were assessed for methodological quality.

Main results: Day-care increases children's IQ, and has beneficial effects on behavioural development and school achievement. Long-term follow up demonstrates increased employment, lower teenage pregnancy rates, higher socio-economic status and decreased criminal behaviour. There are positive effects on mothers' education, employment and interaction with children. Effects on fathers have not been examined. Few studies look at a range of outcomes spanning the health, education and welfare domains. Most of the trials combined non-parental day-care with some element of parent training or education (mostly targeted at mothers); they did not disentangle the possible effects of these two interventions. The trials had other significant methodological weaknesses, pointing to the importance of improving on study design in this field. All the trials were carried out in the US.

Reviewers' conclusions: Day-care has beneficial effect on children's development, school success and adult life patterns. To date, all randomised trials have been conducted among disadvantaged populations in the US. The extent to which the results are generaliseable to other cultures and socio-economic groups has yet to be evaluated.

Case management for people with severe mental disorders (Cochrane Review). Marshall M, Gray A, Lockwood A and Green R. In: The Cochrane Library, Issue 2, 2001. Oxford: Update Software.

Background: Since the 1960s, in many parts of the world, large psychiatric hospitals were closed down and people were treated in outpatient clinics, day centres or community mental health centres. Rising readmission rates suggested that this type of community care maybe less effective than anticipated. In the 1970s case management arose as a means of co-ordinating the care of severely mentally ill people in the community.

Objectives: To determine the effects of case management as an approach to caring for severely mentally ill people in the community. Case management was compared against standard care on four main indices: (i) numbers remaining in contact with the psychiatric services; (ii) extent of psychiatric hospital admissions; (iii) clinical and social outcome; and (iv) costs.

Search strategy: Electronic searches of CINAHL (1997), the Cochrane Schizophrenia Group's Register of trials (1997), EMBASE (1980-1995), MEDLINE (1966-1995), PsycLIT (1974-1995) and SCISEARCH (1997) were undertaken. References of all identified studies were searched for further trial citations.

Selection criteria: The inclusion criteria were that studies should be randomised-controlled trials that (i) had compared case management to standard community care; and (ii) had involved people with severe mental disorder mainly between the ages of 18 and 65. Studies of case management were defined as those in which the investigators described the intervention as 'case' or 'care' management rather than 'Assertive Community Treatment' or 'ACT'.

Data collection and analysis: A study was carried out to test the reliability of the inclusion criteria. Categorical data were extracted twice and then cross-checked, any disagreements being resolved by discussion. Odds ratios and the number needed to treat were estimated. Continuous data collected by a measuring instrument was only included if the instrument (i) had been described in a peer-reviewed journal; (ii) was a self-report or had been completed by an independent rater; and (iii) provided a summary score for a broad area of functioning. Normally distributed continuous data were included if means and standard deviations were available. Non-normal data were included if analysed either after transformation or using non-parametric methods. Tests for heterogeneity were conducted.

Main results: Case management increased the numbers remaining in contact with services (for case management odds ratio = 0.70; 99%CI 0.50-0.98; n = 1,210). Case management approximately doubled the numbers admitted to psychiatric hospital (OR 1.84; 99% CI 1.33-2.57; n = 1300). Except for a positive finding on compliance, from one study, case management showed no significant advantages over standard care on any psychiatric or social variable. Cost data did not favour case management but insufficient information was available to permit definitive conclusions.

Reviewers' conclusions: Case management ensures that more people remain in contact with psychiatric services (one extra person remains in contact for every 15 people who receive case management), but it also increases hospital admission rates. Present evidence suggests that case management also increases duration of hospital admissions, but this is not certain. Whilst there is some evidence that case management improves compliance, it does not produce clinically significant improvement in mental state, social functioning or quality of life. There is no evidence that case management improves outcome on any other clinical or social variables. Present evidence suggests that case management increases healthcare costs, perhaps substantially, although this is not certain. In summary, therefore, case management is an intervention of questionable value, to the extent that it is doubtful whether it should be offered by community psychiatric services. It is hard to see how policy makers who subscribe to an evidence-based approach can justify retaining case management as 'the cornerstone' of community mental healthcare. Case management is compared to the main alternative approach (ACT) in a forthcoming Cochrane review.

Appendix 4. Details of searches carried out

Search Log – Refugee Integration Project

Date of search	21 to 24 May 2001
Location	University of Liverpool (LSTM)
Database / Source	Social Science Citation Index [via Cambridge Scientific Abstracts (CSA)]
Date range	1981 – 19 May 2001
Fields searched	Title; abstract; descriptors (keywords)
Search terms and operators Used (search string) Attach search worksheet Check database search protocol, and note specifications/limitations e.g. maximum number of terms Modify terms and search strategy	Topic=(refugee* OR asylum seeker* OR defector OR displaced person OR foreign worker OR illegal immigra* OR migra* OR minorit*) AND (integrat* OR acculturation OR assimilation OR citizenship OR cultur* OR discriminat* OR equal opportunit* OR intercultural OR interethnic OR marginalization OR multicultural OR native communit* OR race OR segregation OR separation) AND (education* OR employment OR benefit* OR job OR labour OR labor OR unemployment OR work OR health OR trauma* OR stress OR mental OR housing OR accommodation OR communit* OR adjustment OR welfare OR participation OR service*); DocType=Article; Language=All languages; Databases=SSCI; (sorted by latest date)
Results obtained Save to disk, print out or 'write'	2001 (201); 2000 (443); 1999 (348); 1998 (359); 1997 (321); 1996 (335); 1995 (272); 1994 (227); 1993 (190); 1990 to 1992 (229); 1981 to 1989 (22) TOTAL: 2,947
Files in which results are saved	SSCI.cit
Items located or ordered from Library/Editorial Base/Other	31
Items received	10
Items to be cited or used again	5
Notes	Search terms limit: 50 terms

Search Log – Refugee Integration Project

Date of search	30 May 2001
Location	University of Liverpool (LSTM)
Database / Source	MEDLINE
Date range	1966 – February 2001
Fields searched	MeSH headings; title; abstract; descriptors (keywords); publication type
Search terms and operators Used (search string) Attach search worksheet Check database search protocol, and note specifications/limitations e.g. maximum number of terms Modify terms and search strategy* * Search results attached	1. refugees/ 2. "emigration and immigration"/ 3. "transients and migrants"/ 4. 1 or 2 or 3 5. randomized controlled trials/ 6. randomized-controlled-trial.pt. 7. controlled-clinical-trial.pt. 8. random allocation/ 9. double-blind method/ 10. single-blind method/ 11. 5 or 6 or 7 or 8 or 9 or 10 12. exp clinical trials/ 13. clinical-trial.pt. 14. (clin$ adj trial$).ti,ab. 15. ((singl$ or doubl$ or trebl$ or tripl$) adj (blind$ or mask$)).ti,ab. 16. placebos/ 17. placebo$.ti,ab. 18. random$.ti,ab. 19. 12 or 13 or 14 or 15 or 16 or 17 or 18 20. research design/ 21. comparative study/ 22. exp evaluation studies/ 23. follow-up studies/ 24. prospective studies/ 25. (control$ or prospective$ or volunteer$).ti,ab. 26. 21 or 22 or 23 or 24 or 25 27. 11 or 19 or 20 or 26 28. limit 27 to human 29. 4 and 28 30. intervention.tw. 31. 29 and 30
Results obtained Save to disk, print out or 'write'	2,239 trials (refugees/migrants/migration) AND human trials Limit to hits including word 'intervention' = 56 Print results
Files in which results are saved	Rfg-mdln.cit
Items located or ordered from Library/Editorial Base/Other	9
Items received	6
Items to be cited or used again	3
Notes	Modify strategy

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