

HEALTH EVIDENCE NETWORK SYNTHESIS REPORT 43

Public health aspects of migrant health: a review of the evidence on health status for labour migrants in the European Region

Judit Simon | Noemi Kiss | Agata Łaszewska | Susanne Mayer



**World Health
Organization**

REGIONAL OFFICE FOR

Europe

The Health Evidence Network

HEN – the Health Evidence Network – is an information service for public health decision-makers in the WHO European Region, initiated and coordinated by the WHO Regional Office for Europe. It constitutes a single point of access to the best available public health evidence and information.

HEN provides:

- responses to support the decision-making process: up-to-date summaries highlight what is known, indicate gaps in evidence and information, and underscore key areas of debate, including trends and policy options;
- easy access to evidence and information from a number of websites, databases, documents and networks of experts: these resources are carefully selected and their focus and content described.

Evidence in HEN includes findings from research and other important information relevant to decision-makers in public health. Research findings include, for example, the results of randomized controlled trials and systematic reviews. Other important information comes from case studies, reports, experiences and observational studies. HEN interprets the evidence in light of its context, taking into account that what works in one country may or may not work in another.

HEN commissions experts to research and write responses to questions selected among those received from decision-makers throughout the WHO European Region. The responses are evidence based, peer reviewed and periodically updated. HEN works in collaboration with agencies and organizations across the European Region, including the European Commission, and throughout the United Nations system.

HEN and the WHO Public Health Aspects of Migration in Europe project

At the fifth meeting of the WHO European Advisory Committee on Health Research (EACHR) which took place on 7–8 July 2014, EACHR agreed to form a subcommittee on migration and health to review the Public Health Aspects of Migration in Europe (PHAME) strategic framework. EACHR recommended that the Secretariat commission three HEN synthesis reports tackling the challenges of three distinct migration groups: undocumented migrants, labour migrants, and refugees and asylum seekers.

This HEN synthesis report is therefore the result of a cross-divisional effort in the Regional Office between the PHAME project of the Division of Policy and Governance for Health and Well-being and the Evidence and Information for Policy-making unit of the Division of Information, Evidence, Research and Innovation.

Health Evidence Network synthesis report 43

Public health aspects of migrant health: a review
of the evidence on health status for labour migrants
in the European Region

Judit Simon | Noemi Kiss | Agata Łaszewska | Susanne Mayer

Abstract

This report synthesizes the findings on policies and interventions to improve the access to and quality of health care provision for labour migrants in the WHO European Region. Based on a systematic literature review in MEDLINE, Embase, Applied Social Sciences Index and Abstracts (ASSIA), EconLit, Social Sciences Citation Index and a grey literature search of studies published in English between 2005 and 2015, 33 relevant studies were identified. Sixteen studies focused on specific policies or interventions for labour migrants and included information on whether they were successful, 17 studies plus two additional studies included best practice recommendations for future policy-making. The findings point at barriers other than legal ones, which prevent full health care utilization and highlight, inter alia, the role of documentation status, high socioeconomic status, health insurance, labour unions and safe working conditions. Other important factors include the necessity of an intersectoral approach among different government divisions and cross-border cooperation as potential contributors to reducing inequalities for labour migrants.

Keywords

DELIVERY OF HEALTH CARE, EVIDENCE-BASED HEALTH CARE, HEALTH POLICY, MIGRANT WORKERS, SOCIOECONOMIC FACTORS

Suggested citation

Simon J, Kiss N, Łaszewska A, Mayer S. Public health aspects of migrant health: a review of the evidence on health status for labour migrants in the European Region. Copenhagen: WHO Regional Office for Europe; 2015 (Health Evidence Network synthesis report 43).

Address requests about publications of the WHO Regional Office for Europe to:

Publications

WHO Regional Office for Europe

UN City, Marmorvej 51

DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (<http://www.euro.who.int/pubrequest>).

ISSN 2227-4316

ISBN 978 92 890 5109 5

© World Health Organization 2015

All rights reserved. The Regional Office for Europe of the World Health Organization welcomes requests for permission to reproduce or translate its publications, in part or in full.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. The views expressed by authors, editors, or expert groups do not necessarily represent the decisions or the stated policy of the World Health Organization.

CONTENTS

▶ Abbreviations.....	iv
▶ Contributors.....	v
▶ Foreword.....	vii
▶ Summary.....	ix
▶ 1. Introduction.....	1
▶ 1.1. Background.....	1
▶ 1.2. Methodology.....	2
▶ 2. Results.....	4
▶ 2.1. Labour migrants in the WHO European Region.....	4
▶ 2.2. Health status.....	6
▶ 2.3. Barriers to accessing health care.....	7
▶ 2.4. Health policies and interventions for labour migrants.....	9
▶ 3. Discussion.....	22
▶ 3.1. Strengths and limitations of the review.....	22
▶ 3.2. Policy options and implications.....	23
▶ 4. Conclusions.....	26
▶ References.....	27
▶ Annex 1. Search strategy.....	34
▶ Annex 2. Definitions of labour migrants.....	39
▶ Annex 3. Policy/intervention options targeting labour migrants in the WHO European Region.....	41

ABBREVIATIONS

ASSIA	Applied Social Sciences Index and Abstracts
EACHR	European Advisory Committee on Health Research
EconLit	American Economic Association's electronic bibliography
EU	European Union
HEN	Health Evidence Network
ILO	International Labour Organization
IOM	International Organization for Migration
NGO	nongovernmental organization
OECD	Organisation for Economic Co-operation and Development
PRISMA	Transparent reporting of systematic reviews and meta-analyses
SOPHIE	Evaluating the Impact of Structural Policies on Health Inequalities and their Social Determinants, and Fostering Change
TRAIN	Transit to Russia AIDS Intervention with Newcomers
PROMeTHEUS	Health Professional Mobility in the European Union Study



CONTRIBUTORS

Authors

Judit Simon

Professor of Health Economics and Head, Department of Health Economics, Centre for Public Health, Medical University Vienna, Vienna, Austria

Noemi Kiss

Researcher, Department of Health Economics, Centre for Public Health, Medical University Vienna, Vienna, Austria

Agata Łaszewska

Researcher, Department of Health Economics, Centre for Public Health, Medical University Vienna, Vienna, Austria

Susanne Mayer

Senior researcher, Department of Health Economics, Centre for Public Health, Medical University Vienna, Vienna, Austria

External peer reviewers

Allan Krasnik

Professor, University of Copenhagen, Department of Public Health, Danish Research Centre for Migration, Ethnicity and Health, Copenhagen, Denmark

Giovanni Pacini

Senior Research Associate, Institute of Neurosciences, National Research Council, Padova, Italy

Public Health Aspects of Migration and Health (PHAME) team

Santino Severoni, Coordinator
Rita Sá Machado
Rocío Zurriaga-Carda
Matteo Dembech
Sara Barragán-Montes
Grace M. Lassiter
Kate Langley

The PHAME team is part of the European Office for Investment for Health and Development, Division of Policy and Governance for Health and Well-being, WHO Regional Office for Europe.

Health Evidence Network (HEN) editorial team

Claudia Stein, Director
Tim Nguyen, Executive Editor
Ryoko Takahashi, Series Editor
Jane Ward, Copy Editor

The HEN editorial team is part of the Division of Information, Evidence, Research and Innovation, at the WHO Regional Office for Europe. HEN synthesis reports are commissioned works that are subjected to international peer review, and the contents are the responsibility of the authors. They do not necessarily reflect the official policies of the Regional Office.



FOREWORD

Zsuzsanna Jakab, WHO Regional Director for Europe

Migration is a high-priority topic on the policy agendas of most of the Member States in the WHO European Region. To address this priority, the WHO Regional Office for Europe established the Public Health Aspects of Migration in Europe (PHAME) project in 2012.

The main factors contributing to increased migration are natural and human-generated disasters, including social, economic and political instability.

The issues surrounding health and migration are important for a number of key reasons. They not only relate to the ethical implications of unequal access to health care but also are linked to (avoidable) costs to health systems and wider society. As a result, there is not only an ethical imperative to address issues of health and migration but also direct and indirect incentives, such as improved health, social cohesion, economic sustainability and political cooperation.

The lack of a single set of available data and the substantial variations from country to country mean that detecting Region-wide patterns or trends is difficult. The European Region encompasses a wide variety of natural environments and has a highly heterogeneous human geography. As a result, migration trends in the Region are highly complex, and differences between countries in the quality of data and collection methods compound the problems in any attempt to characterize them. Moreover, the collection and analysis of data require cooperation among migrants' countries of origin, transit and destination, and therefore collaboration beyond the boundaries of the European Region.

Evidence-based public health measures to mitigate the health implications of migration could save a significant number of lives and reduce suffering and ill health. They are also likely to be instrumental in effectively addressing growing health care costs and in preventing or mitigating the negative effects of migration on health systems and societies. Nevertheless, insufficient knowledge in many areas has hampered efforts towards more effective planning and implementation of effective strategies to address migration and health. A robust multidisciplinary scientific knowledge base is therefore an essential foundation for enhancing public health practices and policy development.

At its fifth meeting in July 2014, the European Advisory Committee on Health Research (EACHR) agreed to form a subcommittee on migration and health to review the PHAME strategic framework. EACHR recommended that the Secretariat commission three Health Evidence Network (HEN) synthesis reports tackling the challenges of three distinct migration groups: undocumented migrants, labour migrants, and refugees and asylum seekers. The subcommittee concluded that synthesizing and packaging existing evidence, rather than promoting new research, would be more useful for policy-makers.

This is one of the three commissioned reports, which focus on access to and delivery of health care for migrants. These will be the basis for identifying other aspects of health and migration that may be in need of additional research and evidence, and for the development of evidence-informed policies on migrant health and new approaches to improving migrants' health outcomes.



SUMMARY

The issue

Labour migrants form one important subgroup of international migrants. In 2010, labour migrants constituted 7.2–9.5% of the total working population in Belgium, Germany, Greece, Spain and the United Kingdom, and the number of labour migrants in the Russian Federation was estimated at 7–9 million in 2005. With labour migration at such a massive scale, provision of health care for this group has become an increasingly important issue within the WHO European Region. This report focuses on labour migrants specifically, irrespective of documentation status: those seeking work, those employed in the host country, and those who were previously employed or are seeking work but are unable to continue working or find work and remain in the host country.

The synthesis question

The objective of this report is to address the following question by way of a systematic review of the English language literature: What policies and interventions work to improve health care access and delivery for labour migrants in the European Region?

Types of evidence

Evidence was obtained by a systematic literature review and a grey literature search of studies published in English between 2005 and 2015. Of the 33 studies identified, 16 focused on specific policies or interventions for labour migrants and 17 included best practice recommendations. Studies that examined health care inequalities in the health sector mostly focused on policies and interventions for sexual and communicable diseases, or training of health professionals in understanding migrant needs. Many studies examining this topic did so from a labour sector or legal perspective rather than by viewing solely the health care sector's role in contributing to the inequalities in access to and delivery of health care.

Results

Documentation status, high socioeconomic status, access to health insurance, membership of labour unions and safe working conditions were considered in policy-making to reduce inequalities in access to and quality of health care provision for labour migrants. Having the right to access health care did not necessarily mean equality of access. Barriers other than legal barriers were identified that prevented

full utilization (e.g. linguistic and communication barriers, lack of information). Many policies that aim to reduce inequalities in health care access and quality for labour migrants may come by targeting the labour sector in which they work, or the immigration laws that give them rights to access in the first place. This finding emphasizes the need for collaboration between different government sectors. Nongovernmental organizations (NGOs) seem to have a major role in providing health services, particularly for marginalized labour migrants such as sex workers.

Policy considerations

Using a broad definition of labour migration may help policy-makers understand the heterogeneity of the population. Developing effective health policies for labour migrants may require an intersectoral approach among different government divisions within a country and across borders. Key areas for further research to support evidence-informed decision-making in this area are:

- examination of the extent that general migrant policies account for the health needs of labour migrants;
- collation of information on policies and interventions in different countries; and
- establishment of a proper framework for evaluating the effectiveness of policies related to labour migrants.

Policy options based on the evidence reviewed here are:

- improving communication opportunities through support in language learning, information provision in migrants' native language and diversity sensitivity training of health professionals and social workers;
- providing health care close to the workplace or home for better accessibility; and
- using social networks to disseminate information among labour migrants about specific areas of interest (e.g. sexually transmitted infections) and about ways to access the health care system.



1. INTRODUCTION

1.1. Background

Migration is considered a major social, political and public health challenge for the WHO European Region. Between 1990 and 2013, the number of international migrants worldwide rose by over 77 million and Europe had one of the largest growth rates of international migrants (1). With 12.3 million international migrants living in the Russian Federation in 2013, it is the country with the highest number of immigrants in the WHO European Region and second in the world after the United States. In line with the framework of the World Health Assembly resolution 61.17 in 2008, Member States should focus on ensuring equitable access to health promotion, disease prevention and care for migrants (2).

Labour migrants are a subgroup of migrants but there is no global consensus on the definition of a labour migrant. In current practice, the terms “labour migration” and “labour migrants” can refer to the motivation for migration, the legal/visa status of the migrant or the employment status of the migrant. Definitions also vary on whether labour migrants are temporarily or permanently residing in the host country, or even just commuting to the host and living in the country of origin. In practice, some labour migrants have residency and work permits while others have one or the other or neither. Migrants without the proper documentation may avoid accessing health care for fear of deportation. The working definition of labour migrants in this report is: a population living in a country or area other than their country of origin, who are seeking work, are employed in the host country, or were previously seeking work or were employed but are unable to continue working and stay on in the host country. While there are currently no reliable estimates on the exact proportion of migrants in the WHO European Region that are labour migrants, roughly 50% can be assumed to be labour migrants, depending on the definition and measurement method adopted (3). Labour migration is expected to continue its upward trend in the upcoming decades and so provision of health care for this group will become increasingly important.

1.1.1. Positive impacts of labour migration

The international movement of workers has many positive impacts in both the host country and the country of origin. Host countries benefit through alleviation of labour shortages, import of skills, contributions to economic growth, and participation

in the taxation and social welfare schemes (4,5). An inflow of labour migrants of working age provides demographic support for the characteristic ageing societies of most host countries and reduces the expected decline of the workforce (5).

The country of origin can also benefit from labour migration, for example, through relief of unemployment pressures (6); through remittances to support families at home (7), which also impacts the country's economic growth through increased home consumption; and through increased investment flows and encouragement for trading (8) and investment. Governments on both sides increasingly recognize the importance of labour migration by offering regulatory mechanisms and developing new policies to manage labour mobility and maximize the positive impacts (6).

1.2. Methodology

1.2.1. Sources for the review

Literature was found by searching MEDLINE, Embase, Applied Social Sciences Index and Abstracts (ASSIA), EconLit and Social Sciences Citation Index. The websites for the following organizations were also consulted in order to find grey literature: International Organization for Migration (IOM); International Labour Organization (ILO); United Nations Refugee Agency and Department of Economic and Social Affairs; World Health Organization (WHO), Migration Policy Institute; Centre for Research in Occupational Health; European Commission Directorate-General for Migration and Home Affairs; Evaluating the Impact of Structural Policies on Health Inequalities and their Social Determinants, and Fostering Change (SOPHIE); Migrant Integration Policy Index; Organisation for Economic Co-operation and Development (OECD); European Public Health Association; and European Observatory.

1.2.2. Data extraction

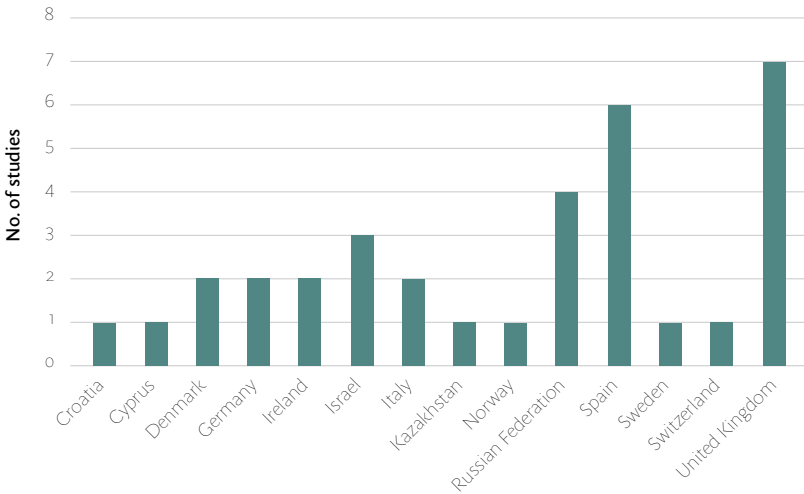
Studies were included for review if they were published between 2005 and 2015 and pertained to migrants in at least one of the Member States of the WHO European Region. Studies were excluded based on pre-determined exclusion criteria: articles must be in English, pertain to the health of labour migrants specifically and mention a health-related policy or intervention.

Annex 1 outlines the flow of the studies found in the search and reviewed in a PRISMA diagram (9).



The systematic literature review identified 2529 studies after removal of duplicates. After screening, 33 studies were used: 16 on specific policies or interventions for labour migrants and 17 suggesting or mentioning policies that could or should be implemented based on the health status or health needs of labour migrants that are not currently being met and contributing to inequalities. Fig. 1 shows the distribution of recipient countries included in the studies reviewed.

Fig. 1. Countries represented in the literature review



Fifteen of the identified studies included both documented and undocumented migrants (10–24); 13 studies focused on documented labour migrants only (25–37), two studies focused on undocumented labour migrants (38,39) and three studies were unclear (40–42).

2. RESULTS

2.1. Labour migrants in the WHO European Region

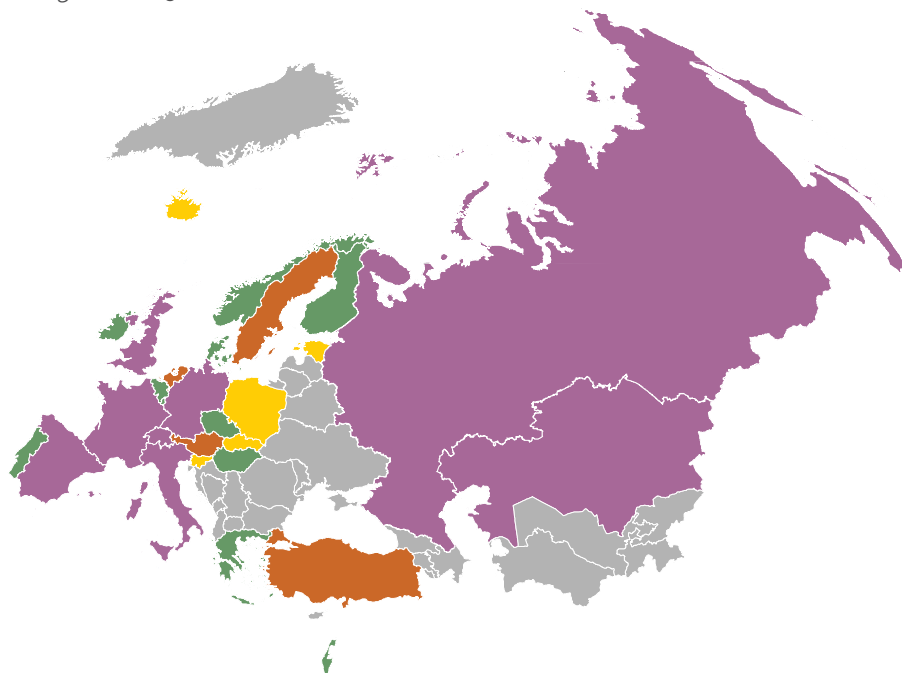
While many labour migrants are legally residing in the host country, some may be working without a contract, without being declared by their employer as an employee, or without having permission to work, such as students (6). (An overview of the definitions of labour migrants by key international organizations is given in Annex 2.)

Regardless of the path for migration and legal status, the ultimate goal of migrants is to enter the labour market and improve their standard of living and family situation (43,44). Work can facilitate inclusion by engaging the migrant in local culture and structures such as learning the language, and providing support systems such as trade unions and health insurance. Importantly, it can improve the socioeconomic status of the migrant, which affects health status and access to health care. However, labour migrants can also be exposed to discrimination in the workplace, characterized by racism, exploitation, psychosocial problems and dangerous working conditions (45). These factors could contribute to a widening of inequalities between labour migrants and the local population. Thus, the labour sector can be an important arena for tackling health inequalities.

Labour migrants can be temporary or permanent, documented or undocumented, and if documented may hold any type of legal status. It should be noted that for policy-making purposes, issues of legal status and duration of migration may be very important factors to consider.

Currently, it is not clear what proportion of the total migrant population in the WHO European Region constitutes labour migrants. Estimates based on legal employment status suggest that approximately half of all migrants are labour migrants (3). In 2007, the five European Union (EU) Member States with the highest proportion of labour migrants as part of their total working population were Belgium (9.5%), Germany (9.4%), Spain (9.0%), Greece (7.5%) and the United Kingdom (7.2%). Based on calculated estimates for the available countries of the WHO European Region, in 2013, the highest numbers of labour migrants were in Germany (5.5 million), the United Kingdom (4.1 million), France (3 million), Italy (2.7 million), Spain (2.6 million) and Switzerland (1.4 million) (Fig. 2) (1,46). While some countries have had a constant flow of labour migrants (e.g. Germany saw a stable flow between 1998 and 2007), some countries (e.g. Spain) have seen a sharp increase in the inward flow of labour migrants since 1998 (3).

Fig. 2. Proxy estimates for the number of labour migrants in the WHO European Region in 2013



Country	Estimated number of labour migrants			
Russian Federation	7 000 000–9 000 000 (3)	■	> 10 000 000	■
Germany	5 400 000	■	5 000 001–10 000 000	■
United Kingdom	4 100 000	■	0–100 000	
France	3 040 000			
Italy	2 700 000			
Kazakhstan	500 000–2 500 000 (12)			
Spain	2 600 000			
Switzerland	1 400 000			
Netherlands	973 000			
Sweden	708 000			
Austria	681 000			
Turkey	605 000			
Portugal	454 000			
Belgium	438 000			
Norway	383 000			
Greece	358 000			
Ireland	350 000			
Denmark	282 000			
Czech Republic	252 000			
Hungary	225 000			
Israel	178 000 (13)			
Finland	147 000			
Luxembourg	130 000			
Slovenia	110 000			
Estonia	86 000			
Poland	77 000			
Slovakia	56 000			
Iceland	18 000			

Note: The authors calculated the number of employed international migrants in Europe for 2013 based on data from the United Nations and OECD. Numbers were calculated by multiplying the number of foreign-born immigrants aged 20–64 years by the employment rate of the foreign-born population aged 15–64 years. While this method has limitations in matching data and not accounting for migrants who are marginally or informally employed or residing without documentation, it aims to provide a general estimate to understand the scope of labour migration in the European Region.

Sources: United Nations, 2013 (1); OECD, 2013 (46).

Despite uncertainties in definitions and numbers, there is a consensus within the international literature that labour migration will continue its upward trend in the upcoming decades. This is driven by differences in employment opportunities, living standards and social services between the host countries and the countries of origin, increased knowledge about and access to information on living conditions and employment opportunities in the host countries, and established intercountry networks based on family relations, culture and history (6).

2.2. Health status

Evidence suggests that foreign status, legal status (documented versus undocumented), employment status and socioeconomic status all have an impact on the health and quality of life of migrants (47–49). If relevant policies do not exist or are ineffective because of discrimination or lower socioeconomic status, evidence indicates that migrants' health can deteriorate rapidly (50). Health insurance coverage is especially limited for undocumented migrants but there is a lack of utilization even among those who are entitled (49).

There are certain work-related factors that influence labour migrants' health. Those lacking the correct documentation often have informal work arrangements and so are not covered by any health or social insurance. Labour migrants often continue working despite illness, which can worsen and prolong common infections (3,12,28). Factors that influence a labour migrants' health status include poor working conditions, high exposure to occupational risk (dangerous jobs, insufficient safety training), lower salaries, limited legal rights and limited access to health care services (11,28,41,51).

The most common work-related health problems reported among labour migrants include musculoskeletal, respiratory and mental health problems. The risk of work-related injuries is higher among labour migrants than in the non-migrant population, particularly for those without a work or residence permit (3). For example, in the Czech Republic, injuries were the most common reason for hospitalization among migrants and the prevalence of work-related injuries was three times higher among migrants than in the general Czech population (52). In Sweden, the United Kingdom and Spain, work-related fatal and serious accidents increased with known increases in numbers of labour migrants (41).



2.3. Barriers to accessing health care

Migrants experience several common barriers to accessing health care services that often translate to underutilization of, and thus lack of benefit from, public health services (25). At the population level, major barriers include lack of information and familiarity with laws and rights regarding health care, occupational health and safety regulations, restrictions to direct access, and costs. At the individual level, the main barriers are communication problems, perceived discrimination, location of services and privacy/trust issues (12,27,36,48,49,53).

2.3.1. Documentation status

Universal access within public health care systems mostly depends on the legal and employment status of the migrant. Documentation status means flexibility in searching for a job and bargaining power for employment factors that influence health. On the other hand, documented individuals are dependent on maintaining a job and payments to the social security system in order to be able to renew their documentation status (21). While undocumented workers appear to be more vulnerable to poor working conditions than documented workers, in some cases environmental, ergonomic and psychosocial risks seem to be similar regardless of documentation status (21).

Undocumented labour and working without a contract is not uncommon among labour migrants in most industries (16,21,54,55), which often can prevent entitlement to the typical national or local health insurance, social assistance or support services. Undocumented migrants tend not to contact health care institutions because of fears of deportation and mostly access health care systems via private providers or NGOs, or use services provided by non-profit-making organizations. Some countries have established specific policies that protect undocumented migrants from deportation when accessing health care in particular circumstances (56,57):

- deportation avoided if treatment not guaranteed in country of origin: Austria, Belgium, Greece, Italy, Norway;
- case-by-case decision: Germany;
- proof of harm in the absence of care: Luxembourg;
- temporary permit for health care in case of pregnancy: France, the Netherlands;
- urgent vital care: Norway; and
- advanced disease: Hungary.

2.3.2. Health insurance

Lack of health insurance is one of the most important barriers in accessing health care services among migrant populations (17,58) as often public health insurance is linked to documentation status. Health insurance coverage for the labour migrant population varies from country to country. In Israel, the absence of a work visa excludes labour migrants from medical insurance coverage (22). Registered labour migrants in Norway have full rights to health care services and social benefits but those not registered as employees lack these rights (12). In the Czech Republic, only those non-EU citizens who are employed or residing legally are eligible for public health insurance, while others are forced to purchase commercial health insurance or remain uninsured (49). In Cyprus, the government made health insurance coverage a legal requirement for a residence permit in order to give equal health care access to all working migrants (27).

In some instances (e.g. infectious diseases), the public health impact of untreated cases is so large that treatment is usually not limited to those with health insurance. Most host countries have introduced measures for coverage of health issues with a public health impact, such as infectious diseases (38,58), and specific health insurance schemes for labour migrants that could improve access to health services have been proposed (38).

2.3.3. Language and communication

A key element for the effectiveness of any written material provided to labour migrants is that it should be provided in the native language of the migrant; this includes information on training or safety (14,21,24,30,41,42), health care services (12,27,36), health insurance options (17,58) and legal rules. The provision of translators and cultural mediators is also key to ensuring good communications (53) and provision of language courses will help integration at work and in the community (30).

In many cases, religious, community and family networks are the most effective way to reach migrants and to promote healthy lifestyles and distribute information (15). Mobilizing communities and labour groupings can also help with developing and implementing culturally sensitive programmes and engaging approaches that can reduce risky behaviour and strengthen attitudes towards healthy behaviour. "Diaspora" networks can be effectively used to disseminate information and help integrate new migrants into the health care and labour sectors.



2.3.4. Socioeconomic status

Socioeconomic processes shape health status in the general population, and even more so in migrant populations. Some studies concluded that socioeconomic status was more important for assessing health inequalities than legal status (59,60). For labour migrants, socioeconomic factors are multifaceted and context specific and so cannot be generalized to labour migrants across the whole WHO European Region (59). Employment facilitates inclusion into the host country's health system by engaging the migrant in local culture and local structures through facilitating language learning, providing health insurance and, very importantly, improving socioeconomic status (43).

2.3.5. Gender

While historically labour migrants have been predominately male, recent figures show that the current male:female ratio is 1:1 in many parts of the WHO European Region (61). Nevertheless, gender distribution within each country and each type of industry can be important, especially for targeted policies (e.g. male migrant sex workers in Germany (16)). A study from Kazakhstan showed that female labour migrants are more likely to suffer from physical and mental health problems (38). They also more often have problems of gender-based discrimination and violence. In Israel, a free medical service for migrants found higher rates of psychiatric hospitalization and suicide attempts among women than men (22). There are also differences in occupational hazards: women were more often employed in household services while men worked in the construction services (11).

2.4. Health policies and interventions for labour migrants

Labour migrants have a health status that differs from both the native population and from other migrant groups because of the work-related factors that affect their health. However, participation in the labour market also offers additional opportunities for policy-makers to target health inequalities in this group. In many cases, such as avoidance of injury or conforming with safety regulations, labour policies targeting the health and safety of the worker are, in effect, health policies (13,24). For the purposes of this report, improving access to and quality of health care is considered to encompass both health care policies and labour policies, including access to safe working conditions and access to liveable wages in order to afford health care and healthy living conditions. Interventions to improve

health status can come from many different sectors, including the private, public or NGO sectors, as well as different government divisions such as health, labour, immigration or law enforcement. Most EU Member States grant full equality of treatment to “third-country nationals” (non-EU citizens) who are legally working in the country with permanent status and sometimes even with temporary status (3). There are, however, important barriers other than legal restrictions, such as lack of information, cultural and linguistic barriers, and socioeconomic deprivation. The existence of services does not necessarily lead to utilization (49).

Although there are a number of studies that have examined policies within the WHO European Region that target the known barriers to accessing good-quality health care for international migrants in general, few specifically consider labour migrants as a group nor did any study consider European-wide policies. A 2009 report focusing on the EU (62) found 11 of the 25 included countries had established specific national policies/interventions to improve migrant health beyond statutory legal entitlements (Austria, England [United Kingdom], France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and Switzerland). The main health issues addressed were sexual and reproductive health, infectious diseases, screening, family health and mental health. Preventive services and long-term care did not receive sufficient attention (62). The focus of the interventions was both on patients (demand side), with initiatives such as improving health literacy with materials on health services and entitlements in the migrants’ own language, and on providers (supply side), with training to improve cultural competence. Implementation of the policies and interventions remained a challenge, particularly where policies involve the modification of existing health care structures, such as in Austria, England, Ireland and Portugal (62).

Evaluation of whether policy targets have been achieved remains a further challenge even when annual appraisals are implemented. In Portugal, for example, where there is an annual report from the High Commissariat for Integration and Intercultural Dialogue on implementation of the Plan for the Integration of Immigrants, they could not confirm whether the expected goals had been achieved because of a lack of statistical resources (3).

Existing health policies seem to have categorized labour migrants either by industry or by documentation status. The industries identified in this review are construction (10,11,14,15,29,38,41), sex work (16–19,63), agriculture (11,12,20), trade (11,15,38), cleaning services (30,42), food services (11,29), household services (over 16 years of age, living in the household and receiving wage or compensation for exclusively

domestic services for one or several heads of households) (21,27), livestock (31,53), public services (29,32), fishing (40) and health care workers (33). Table 1 outlines industry-based policy/interventions for 12 countries and Fig. 3 shows a summary of the findings.

Table 1. Implemented policies/interventions targeting labour migrants in the WHO European Region

Country of implementation	Sector	Country or region of origin	Policy/intervention type and details	Reference
Croatia	Fishing	NA	Capacity building: a programme for occupational health professionals to facilitate the understanding of HIV risks and reduce social stigma associated with HIV among migrant workers	40
Cyprus	Household services ^a	Bangladesh, Philippines, Sri Lanka, India, Pakistan	Legal framework: health insurance coverage as legal requirement before a residence permit is granted, to improve access to health care for labour migrants	27
Denmark	Cleaning services	NA	Occupational health, prevention: FINALE programme provides training interventions on proper working techniques in the native language of migrant cleaners	42
Denmark	Cleaning services	Turkey, Thailand	Occupational health: adult vocational training centres offer proper working technique courses for labour migrants to prevent unnecessary strain and minimize ill-effects among cleaning staff	30
Germany	Sex work	Romania, Bulgaria	Access to health care, prevention: NGO initiatives to provide free medical and social consultations and advice to undocumented migrant sex workers	16
Ireland	NA	NA	Prevention: Health and Safety Act regulates the provision of instruction, training and supervision in a manner, form and language that is understood by foreign employees	24

Table 1 contd

Country of implementation	Sector	Country or region of origin	Policy/intervention type and details	Reference
Ireland	NA	NA	Representation, occupational safety: labour migrant unions to maintain and improve working conditions and ensure fairness and due process in the workplace or wider society	13
Israel	Any	Africa, Eastern Europe, Asia, South America, Middle East	Access to health care: Open Clinic providing primary medical services for labour migrants	22
Israel	Health workers	Middle East	Prevention: employer-initiated vaccination programme designed to protect health workers against varicella-zoster virus infections due to low immunity of labour migrants	33
Italy	Sex work	Africa, Eastern Europe	Health promotion, prevention, access to health care: Sirio Project provides social, psychological and medical support and educational programmes to female sex workers to prevent sexually transmitted diseases	63
Russian Federation	Construction work, food services, public services	Tajikistan	Prevention: HIV prevention programme (TRAIN) designed to reduce HIV risk behaviours in Tajik male labour migrants by enhancing awareness, prevention skills and help-seeking through information counselling	29
Spain	Household services ⁹	Romania, Morocco, Ecuador, Columbia, Senegal, sub-Saharan Africa	Legal framework: Special Household Service Regime regulates the labour rights of household services, such as taxes paid by employer and employee, unemployment subsidies, disability compensation, work hours, vacation time	21
Spain	Construction work	NA	Occupational health, safety training: professional construction cards provide safety training in foreign languages to improve understanding of safety	41

Table 1 contd

Country of implementation	Sector	Country or region of origin	Policy/intervention type and details	Reference
Sweden	Construction work	NA	Occupational safety: Swedish Work Environment Authority provides information campaigns for foreign workers to improve their health and safety issues	14
Switzerland	Sex work	Brazil, Romania, West Africa	Access to health care, health promotion: Fleur de Pave association and Point d'Eau centres provide free primary health care, psychosocial support and health promotion to street-based sex workers	17
United Kingdom	Any	Poland	Access to health care, psychosocial support: Barka Project to provide occupational skills training, rehabilitation and housing for homeless alcoholic migrant workers	34
United Kingdom	Construction work	NA	Occupational health, safety training: professional construction cards provide safety training in foreign languages to improve understanding of safety practices	41

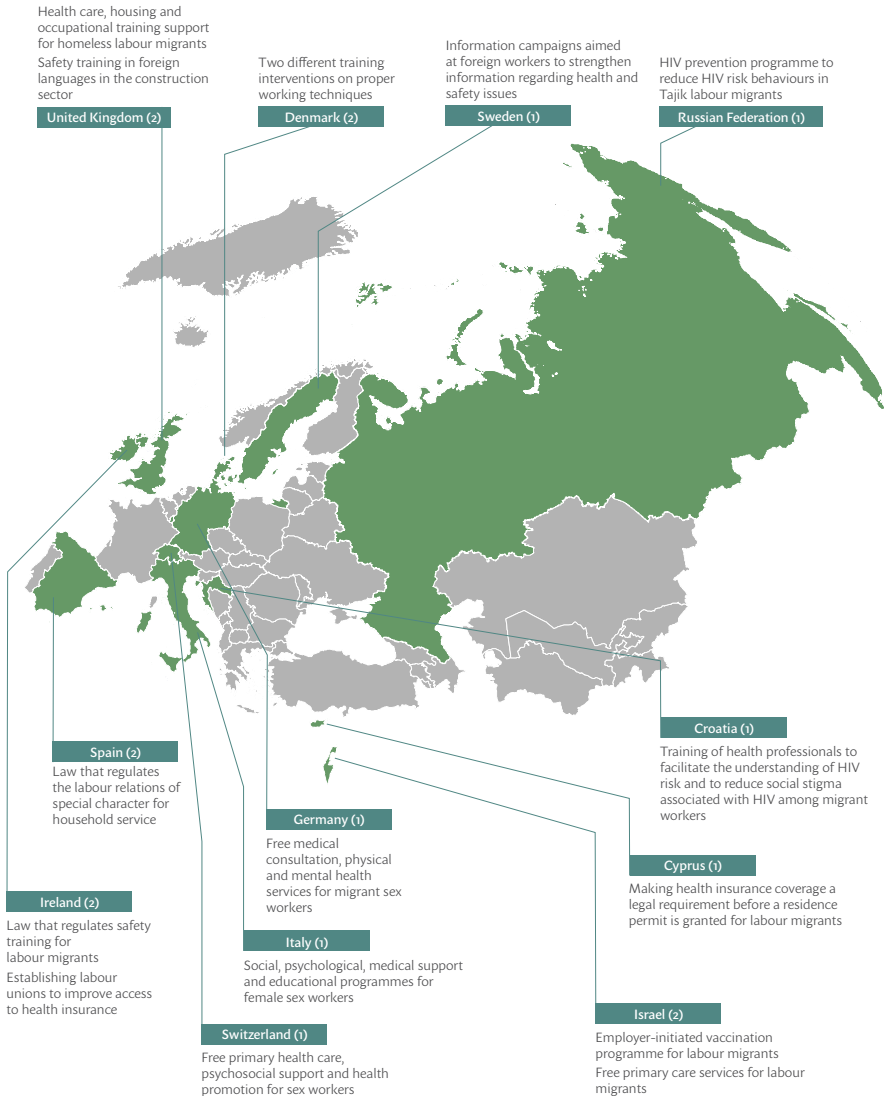
NA: not appropriate; NGO: nongovernmental organization.

^a Defined as carried out by people over 16 years of age; who perform exclusively domestic services for one or several heads of households, or people who co-habit in one household; whose services are provided where the household members live; and who receive a wage or compensation for their services.

2.4.1. Multinational cooperation

Labour migration under bilateral agreements often includes interventions in both host country and the country of origin and is more common for workers in the health sector; however, such agreements tend to consider labour mobility rather than the health of the migrants themselves. There are a number of initiatives that develop regional, national and international cooperation to support health in labour migrants in their home and host countries (10).

Fig. 3. Summary of implemented policies/interventions targeting labour migrants in the WHO European Region





Case study 1 contains two examples of interventions occurring in both host country and country of origin and involving multilevel cooperation between countries and NGOs. The Transit to Russia AIDS Intervention with Newcomers (TRAIN) project (29) is an example of overcoming barriers to health access by targeting labour migrants in transit, supporting integration with social and health networks, overcoming language and cultural barriers, and taking advantage of diaspora networks for disseminating information.

Case study 1. Interventions in both host and home countries

The Barka Project

The Barka Project in London is part of a larger effort also occurring in Belgium, Germany, Ireland, the Netherlands and Poland and involving both government and NGOs (34). The intention is to improve access to occupational skills training, rehabilitation and housing for migrants suffering from homelessness and substance misuse. The project connects the migrant with both home and host country services depending on needs and helps to overcome cultural and language barriers in accessing health care in the host country. In 2014, 145 people were given occupational skills training, rehabilitation or help in finding homes in London.

TRAIN

TRAIN is a three-session HIV prevention programme designed to provide information about help seeking and community support in Moscow, spousal communication about HIV prevention, and communication with community members about HIV prevention (29). It takes place on a train from Tajikistan to Moscow on which most Tajik labour migrants make the journey to work in the Russian Federation in construction and bazaars. The project is supported by a grant from the United States Civilian Research and Development Foundation. The goal is to reduce HIV risk behaviours – enhancing awareness, prevention skills and help seeking through information counselling. Cooperation was sought from previous Tajik migrants, diaspora community leaders in Moscow, the Tajikistan Government and Ministry of Health. The TRAIN group reported significant increases in condom knowledge and awareness of HIV. They also noted that interventions should also address those difficulties specific to the social and familial experience of married male labour migrants, including adaptation to migrant work life in Moscow.

Occupational health professionals in Croatia undertook a training programme to facilitate the understanding of HIV risks and reduce social stigma associated with HIV among labour migrants. Empirical evidence collected in 2004 and 2006 during compulsory medical examination prior to licensing of labour migrants showed that knowledge of safe sexual behaviours did increase over time (40).

2.4.2. Policies initiated at entry to a host country or to employment

A few studies did look at specific programmes at the national level, although, not surprisingly, these tended to target all migrants or all people who did not speak the native language, not only labour migrants. One study assessed an immigration policy to improve access to health care by making it a legal requirement for a migrant to register for health insurance before being granted a residency permit (27). The study concluded that requiring health care insurance at entry was not an effective tool because of the lack of information in the migrant's own language on how to choose health insurance and how to utilize services.

2.4.3. Role of NGOs

NGOs are often involved in the care of migrants and act in an intermediary role supporting the migrant in accessing the host country's systems (16,17,22,33,63). In Italy and Switzerland, free mobile units and outpatient care centres run by an NGO provided health care and health promotion for sex workers (17,63). The mobile units targeted sex workers in their local working areas to provide them with anonymous testing, treatment and counselling for HIV and sexually transmitted diseases. The units were also intended to raise awareness about outpatient clinics that provided free and anonymous counselling and testing. Printed materials on prevention were also provided (63). Case study 2 describes two NGOs providing care for labour migrants. The Israeli clinic is an example of an effective training programme for physicians in areas with high numbers of migrants (22). The German outreach clinics provide care to workers who do not access the formal system (e.g. for reasons of cost or unclear citizenship status); it illustrates the difficulty of reaching an undocumented working population and suggests that health-promoting activities such as Internet chats, peer health promoters and community mapping to allow for exchange of experiences might be effective (16).



Case study 2. NGOs providing health support for migrants

A migrant-minded clinic in Israel

A clinic for labour migrants and refugees in Israel trained staff in awareness of cultural diversity and differences in world views, and avoiding the racism that is sometimes shared by both clinicians and patients (22). Translators and affordable care were provided. They also identified the need for health professionals to understand the absence of the usual social support systems, so basic needs such as food, shelter, family support or childcare should be considered when making health care decisions such as referrals and follow-up appointments. The clinic also helped with the process of documentation to help to ease mental stress.

Comprehensive access to health care for migrant sex workers

While the access to health services and safety of documented sex workers are protected legally in Germany, undocumented workers have no such protection and face barriers of both costs and unclear citizenship status. Since the 1990s, a series of NGO-funded projects have been established to provide free medical and social work consultations at a combination of drop-in centres and mobile outreach units. Clinic physicians are either from the local health departments or are volunteers. A study in 2013 examined the effectiveness of these clinics and concluded that they could not cover the needs of many sex workers, for example those working in restricted areas that prohibit public prostitution or undocumented male sex workers from other EU countries (16).

2.4.4. Role of labour unions

In general, labour unions advocate for safer working conditions, better benefits such as health insurance access, fairness in work processes and compliance with workers' rights (13). Labour migrants are, therefore, likely to benefit from formal membership (13). Current evidence, for example, shows that unionized immigrants are more likely to earn higher wages and enjoy wider pension coverage; however, in this small study, labour migrants had approximately the same levels of health insurance coverage whether unionized or not (13).

2.4.5. Safety in the workplace

Six studies looked at interventions in the labour market to promote safety and prevent injuries and health-related detriments: one study through contract law (21), four through training courses for labour migrants (24,30,41,42) and one through information packs for labour migrants (14).

In Ireland, the Health and Safety Act regulates the provision of instruction, training and supervision in a manner, form and language that is understood by foreign employees; however, the high proportion of eye injuries among migrant workers would suggest that this group was still not being provided with training courses and safety literature (24).

A law implemented by the Danish Ministry of Education required adult vocational training centres to offer courses in languages other than Danish. A course to train immigrant cleaners on proper working techniques to avoid long-term and short-term physical harm was considered successful based on consequent changes observed in working techniques (30). A further study concluded that training in the native language was an important factor for increasing attendance at such training interventions (42).

The Swedish Work Environment Authority produced safety brochures to strengthen information regarding health and safety issues for labour migrants (14). Language was an important factor in the effectiveness of the intervention: the problem of providing material in every possible language was overcome by introducing easy-to-understand pictures with as little writing as possible and focusing on the 13 most common work situations. The brochures were designed to fit in the pocket and to provide information and knowledge about specific occupational accidents and occupational diseases that occur frequently during construction work and their prevention. However, success was not evaluated formally (14).

“Professional construction cards” have been used in Spain and the United Kingdom conditional on health and safety training and provision of foreign language classes to improve understanding of safety practices; however, again here the study did not formally evaluate the success of this intervention (41).

Similarly, the Spanish government has created six social security regimes according to the type of work involved in an attempt to ensure a safe working environment (21), with enforcing regulations regarding working hours and minimum wage scales for labour migrants working in agriculture, construction and food services.



2.4.6. Specific industries

Although there are many industries with a high proportion of labour migrants, the household and sex work industries seem to have some unique properties and this is well reflected in the number of relevant published studies. Most importantly, they are both characterized by a large proportion of labour migrants without documentation and/or formal contracts. Lessons drawn from studies on policies/interventions in the household industry also highlight the importance of formalization, regularization and legalization of the migrant in order to integrate the person fully into the health care sector (case study 3).

Case study 3. Domestic service: the Spanish “Special Household Service Regimen”

The Spanish Ministry of National Social Security and the Ministry of Labour and Immigration divide workers into six groups or social security regimes according to the type of work they perform; the grouping governs the amount of taxes paid by the employer and employee, injury and illness leave, subsidies, disability compensation, pensions, working hours, vacation time, and hiring and firing practices. The Special Household Service Regimen covers workers who receive a wage to perform exclusively domestic services in various arrangements. A crucial element of domestic services is the nature of the contracts, which can often be verbal, making it difficult for workers to register complaints and regulate adherence to sick leave and occupational safety measures. A study carried out as part of a bigger project (Project Immigration, Work and Health (ITSAL)) found that documentation status was relevant in terms of empowerment and bargaining but did not appear to influence work tasks or exposure to hazards directly. The authors suggested that that household service workers should be covered by the “General Regimen” as that would establish better conditions, at least for documented workers (21).

ITSAL is a study in Spain about the working conditions and characteristics of precarious employment for immigrant workers and their relation to health. It includes an analysis of available occupational injury data on foreign workers, qualitative interviews and focus groups with immigrant workers, and a questionnaire developed with the information obtained in the previous phases of the study (51).

Since the sex work industry is not recognized as a formal labour market, migrant sex workers are usually not able to obtain residence or work permits. Therefore, several policies have been established in the WHO European Region to ensure access to free primary care, regular checks and psychological support for this vulnerable population (16–18,63). These policies are characterized by multilevel interventions affecting both access to and quality of care. Most European countries have developed policies that support sex labour migrants in gaining access to health care services and screening directly (16,57). It is, however, unclear whether mandatory testing is good or bad. Some research points to policy flaws that include high out of pocket costs for workers, stigmatization and lack of access to facilities in which to conduct such testing (16,57). Lessons from the sex work industry highlight a great need for internationally standardized regulations and information about available care entitlements. Support and services organized by NGOs also seem to play an important role in the sex work sector (see case study 2). These programmes, however, are not able to cover all medical needs of these labour migrants and do not provide continued long-term care. Existing sexual and reproductive health services are an area that would benefit from interventions to cover the emerging needs of labour migrants (35) and from the development of outreach programmes and facilitated access to health care centres (18). The United Kingdom has developed a transnational cooperation in monitoring and facilitating disease surveillance for migrant communities to ensure appropriate risk reduction and improve access to health care services (25). Table 1 also lists interventions for specific sectors of employment.

2.4.7. Workplace health promotion and disease prevention programmes

- The workplace is where labour migrants can be identified and reached most easily. It is also a suitable platform to implement prevention programmes for the reduction of common infectious diseases or occupational accidents. For example, studies from Germany (32), Norway (12) and Spain (11,28) recommend policies that would improve working conditions of labour migrants, including:
 - enforce regulations regarding working hours and minimum wage scales for labour migrants (11);
 - provide good working conditions, including salaries, working day length, rest places at work and established breaks, protection from job loss if ill, training courses and enhanced employer–employee relationships (20,21,32,38);
 - provide sanitary facilities for workers to decrease the potential risk of direct or indirect contamination of food products (12);



- implement laws that support surveillance and control of infections at the workplace (12), including vaccination for those working in the meat-processing industry (53);
- identify and immunize health care workers with evidence of reduced immunity (33); and
- develop multilanguage education programmes for migrant workers, for example to reduce risk of infection transmission (31,33).

2.4.8. Health promotion and disease prevention programmes

Studies that examined existing policies or recommended health promotion policies considered migrants as a whole group and mainly examined two areas: control of infectious diseases, particularly HIV (10,15,19,26,51), and provision of information and support for accessing health services (26,27,36,38,53). Examples included training of health professionals in understanding migrant needs and eliminating discriminatory practices (13) and providing language services (e.g. information written in different languages) and interpreters (8) and an industry-based approach (64).

3. DISCUSSION

3.1. Strengths and limitations of the review

Although migration in the European Region is increasing, there is relatively little information about the health status of, and health policies for, labour migrants. The information available also often does not distinguish between documented and undocumented labour migrants.

Information on policies targeting labour migrants are more likely to be in the forms of government documents and other non-peer reviewed sources. One example of the information available when exploring government documents and other non-peer reviewed sources are bilateral agreements. There are many international and bilateral agreements that focus on workforce mobility policies.

The current peer-reviewed literature found in this review had little specific information on health policies and interventions relating to labour migrants' access to care and quality of care. No studies could be identified assessing European-level policies, although it is likely that such initiatives do exist. Publications from IOM, ILO, WHO, OECD and the United Nations also provided some data, but often for migrants in general.

Studies that specifically referred to labour migrants were mainly focused on specific industries. It remains unclear whether or not migrants from within the EU have better access and quality of health care than migrants from outside the EU. Although there has been some success in cross-border cooperation including the host countries and countries of origin (10,29,34), more research is needed to support development of good practice in this area. It is not clear from the evidence found what the intersectoral situation is with regard to policy-making, implementation and enforcement. This information would help in assigning responsibilities and involving all potential stakeholders.

Based on the evidence gaps identified, further research to support evidence-informed policy-making should assess:

- the extent to which policies for migrants in general account for the health needs of labour migrants;



- which types of health insurance/health provision are best able to cover the worker migrant population;
- what information on policies and interventions exists at the government level in individual countries; and
- what the proper framework is for evaluating the effectiveness of policies related to labour migrants.

3.2. Policy options and implications

One of the most important implications of the evidence found in this review is that health access and health inequalities may begin at the workplace. The workplace and labour sector are therefore crucial for policy-makers in reducing inequalities and improving access to health care for these migrants.

Work safety is an important factor in terms of access to and quality of health care delivery for labour migrants. Labour migrants tend to have physically strenuous jobs and often work longer hours without breaks. They also may not understand issues of work safety or their rights as workers (12,27,28,38,53,63–65). Labour unions can be effective advocates for safer working conditions and the promotion of equality in access and quality of health care for labour migrants, who are likely to benefit from formal membership (45). A key element for the effectiveness of training courses and safety literature in reducing work-related injury and long-term physical deterioration was to provide instructions and information materials in the native language of the migrant (7,8,40,50,64,65). Factors that have a positive impact on work safety and consequently on health inequalities are documentation status, written contracts, membership of labour unions and training courses (14,21,24,30,41,42).

There are also a number of access points where information regarding health care and health services could be made available to labour migrants, including during the legal immigration process (27,29), in the workplace (14,21,41), at outreach clinics (16,22) and via social networks (15). International and bilateral agreements that focus on workforce mobility tend to consider only aspects of employment but not health. However, at this level, health considerations of labour migrants would be a feasible add-on to existing initiatives in the area. The Health Professional Mobility in the European Union Study (PROMeTHEUS) project examined migration within the health professional labour force (66), although it was not identified under the review criteria because it did not consider the health of the migrants themselves. The aim of such agreements are ethical recruitment, international development,

common labour markets and optimization of health care in border regions. Such policies facilitate and steer the mobility of people but also have an impact on the legal status and working conditions of the migrants (thus affecting their health). Historically, bilateral labour agreements have become broader, thus making this a feasible framework on which to add the health of the migrants themselves to the existing policy-making (66).

Provision of language courses and vocational training courses in different languages also was seen to improve worker health (14,21,30,41,42,64,65).

Labour migration can have benefits for both host and donor countries, and bilateral cooperation by governments could improve knowledge of and access to the health care system in the host country before arrival and on arrival.

Overall, this report highlights several important concepts in the current situation with regard to access to and quality of health care provision for labour migrants:

- the labour sector is just as important as the health care sector for relevant policy making;
- NGOs currently have a significant role in service provision;
- location of interventions close to work or home is important for accessibility and uptake;
- entitlement to health care does not necessarily mean equality of access because of other barriers;
- sociocultural factors can be both barriers to access and a means of disseminating information; and
- labour migrants can have a positive impact on a host country and it is in the economic interest of the host country to keep this population healthy.

The main policy options identified are to:

- identify labour migrants in a way that will help policy-makers better understand the heterogeneity of the population;
- recognize infectious disease prevention as an important endeavour needing national and international cooperation and resource allocation;



- provide treatment programmes for sexually transmitted diseases using NGOs, outreach programmes, safe sex education and adjustment of existing sexual and reproductive health services to migrant-friendly systems;
- provide information about the health care system and how to navigate it, including coverage options, contact details and free services;
- develop policies that guarantee free access to primary, maternity and child health care, provide health insurance cards to cover a basic package of health services and subsidize labour migrants' health expenditure if needed;
- disseminate information among labour migrants at the workplace, through social networks and in different languages; and
- provide translation services, counselling and education on health matters to labour migrants and their families.

4. CONCLUSIONS

The current report on policies and interventions to improve the access to and quality of health care provided to labour migrants in the WHO European Region collates relevant contextual information, brings clarification to important definitions, provides useful schematics, presents relevant policy evidence from English language scientific publications, identifies major considerations for future policy-making in the area, and provides impetus for future research. The results discussed herein can be used to facilitate discussions at different levels of policy-making. While labour migrants may be included as a group in overarching migrant policies, it is important to have an understanding of and be able to identify this group as a subgroup with specific needs. This review highlights that many policies that eliminate inequalities in health care access and quality for this group of migrants may come from sectors other than the health care sector, and puts an emphasis on collaboration between different sectors in the future, implying the necessity for a link between social security, health care and other governmental departments. There is also a clear need for further international standardization of the definition of labour migrants, specific evaluation of the effectiveness of general migrant policies in the labour migrant subgroup, and better understanding of how international migrant policies may be developed under such heterogeneity in national health care systems and of the barriers to health care access within the WHO European Region.


Despite the above-discussed limitations of the report and the major gaps identified in evidence, the findings of this report are likely to facilitate future evidence-informed policy-making targeting the health inequality of labour migrants and accelerate cooperation between relevant stakeholders from different sectors, locally, nationally and internationally, to achieve these.




REFERENCES

1. International migration report 2013. New York: United Nations, Department of Economic and Social Affairs; 2013 (<http://www.un.org/en/development/desa/population/migration/publications/wallchart/docs/wallchart2013.pdf>, accessed 29 July 2015).
2. Sixty-first World Health Assembly. Health of migrants. Geneva: World Health Organization; 2008 (WHA61.17) (http://apps.who.int/gb/ebwha/pdf_files/A61/A61_R17-en.pdf, accessed 21 July 2015).
3. Rechel B. Migration and health in the European Union. New York: Open University Press; 2011.
4. The economic labour market and skills impacts of migrant workers in Northern Ireland. Oxford: Lisburn: Oxford Economics; 2009 (http://www.delni.gov.uk/the_economic_labour_market_and_skills_impact_of_migrant_workers_in_northern_ireland.pdf, accessed 5 August 2015).
5. Rudiger A, Spencer S. Social integration of migrants and ethnic minorities. In: The Economic and Social Aspects of Migration, 21–22 January 2003. Brussels: European Commission and the Organisation for Economic Co-operation and Development; 2003 (<http://www.oecd.org/migration/mig/15516956.pdf>, accessed 5 August 2015).
6. Usher E. Migration and labour. In: Usher E, editor. Essentials of migration management: a guide for policy makers and practitioners. Geneva: United Nations Publications; 2004.
7. Straubhaar T, Vâdean FP. International migrant remittances and their role in development. Paris: Organisation for Economic Co-operation and Development; 2005.
8. Strutt A, Poot J, Dubbeldam J. International trade negotiations and the trans-border movement of people: a review of the literature. Waikato: University of Waikato; 2008 (Discussion Paper 66) (<http://researchcommons.waikato.ac.nz/bitstream/handle/10289/919/PSC-dp-68.pdf?sequence=1&isAllowed=y>, accessed 5 August 2015).

9. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Ann Intern Med.* 2009;151(4):264–9.
10. Amirkhanian YA, Kuznetsova AV, Kelly JA, Difranceisco WJ, Musatov VB, Avsukevich NA et al. Male labor migrants in Russia: HIV risk behavior levels, contextual factors, and prevention needs. *J Immigr Minor Health.* 2011;13(5):919–28.
11. Ahonen EQ, Porthé V, Vazquez ML, Garcia AM, Lopez-Jacob MJ, Ruiz-Frutos C et al. A qualitative study about immigrant workers' perceptions of their working conditions in Spain. *J Epidemiol Community Health.* 2009;63(11):936–42.
12. Guerin PJ, Vold L, Aavitsland P. Communicable disease control in a migrant seasonal workers population: a case study in Norway. *Eurosurveillance.* 2005;10(3):48–50.
13. Turner T, Cross C, O'Sullivan M. Does union membership benefit immigrant workers in “hard times”? *J Ind Relat.* 2014;56(5):611–30.
14. Wiberg V. Communication of ergonomics in building and construction. *Work.* 2012;41(Suppl 1):4111–15.
15. Weine S, Bahromov M, Mirzoev A. Unprotected Tajik male migrant workers in Moscow at risk for HIV/AIDS. *J Immigr Minor Health.* 2008;10(5):461–8.
16. Castañeda H. Structural vulnerability and access to medical care among migrant street-based male sex workers in Germany. *Soc Sci Med.* 2013;84:94–101.
17. Darling KE, Gloor E, Ansermet-Pagot A, Vaucher P, Durieux-Paillard S, Bodenmann P et al. Suboptimal access to primary healthcare among street-based sex workers in southwest Switzerland. *J Postgrad Med.* 2013;89(1053):371–5.
18. Folch C, Esteve A, Sanciente C, Martro E, Lugo R, Molinos S et al. Prevalence of human immunodeficiency virus, Chlamydia trachomatis, and Neisseria gonorrhoeae and risk factors for sexually transmitted infections among immigrant female sex workers in Catalonia, Spain. *Sex Transm Dis.* 2008;35(2):178–83.
19. Weine S, Golobof A, Bahromov M, Kashuba A, Kalandarov T, Jonbekov J et al. Female migrant sex workers in Moscow: gender and power factors and HIV risk. *Women's Health.* 2013;53(1):56–73.

- 
20. Montoya-Garcia ME, Callejon-Ferre AJ, Perez-Alonso J, Sanchez-Hermosilla J. Assessment of psychosocial risks faced by workers in Almeria-type greenhouses, using the Mini Psychosocial Factor method. *Appl Ergon*. 2013;44(2):303–11.
 21. Ahonen EQ, Lopez-Jacob MJ, Vazquez ML, Porthe V, Gil-Gonzalez D, Garcia AM et al. Invisible work, unseen hazards: the health of women immigrant household service workers in Spain. *Am J Ind Med*. 2010;53(4):405–16.
 22. Lurie I. Psychiatric care in restricted conditions for work migrants, refugees and asylum seekers: experience of the Open Clinic for Work Migrants and Refugees, Israel 2006. *Isr J Psychiatry Relat Sci*. 2009;46(3):172–81.
 23. Maslovitz S, Kupferminc MJ, Lessing JB, Many A. Perinatal outcome among non-residents in Israel. *Isr Med Assoc J*. 2005;7(5):315–19.
 24. Saeed A, Khan I, Dunne O, Stack J, Beatty S. Ocular injury requiring hospitalisation in the south east of Ireland: 2001–2007. *Injury*. 2010;41(1):86–91.
 25. Burns FM, Evans AR, Mercer CH, Parutis V, Gerry CJ, Mole RC et al. Sexual and HIV risk behaviour in central and eastern European migrants in London. *Sex Transm Infect*. 2011;87(4):318–24.
 26. Weishaar HB. Consequences of international migration: a qualitative study on stress among Polish migrant workers in Scotland. *Public Health*. 2008;122(11):1250–6.
 27. Pithara C, Zembylas M, Theodorou M. Access and effective use of healthcare services by temporary migrants in Cyprus. *Int J Mig Hlth Soc Care*. 2012;8(2):72–85.
 28. Galon T, Briones-Vozmediano E, Agudelo-Suarez AA, Felt EB, Benavides FG, Ronda E. Understanding sickness presenteeism through the experience of immigrant workers in a context of economic crisis. *Am J Ind Med*. 2014;57(8):950–9.
 29. Bahromov M, Weine S. HIV prevention for migrants in transit: developing and testing TRAIN. *AIDS Educ Prev*. 2011;23(3):267–80.
 30. Jensen FW, Frydendall KB, Flyvholm MA. Vocational training courses as an intervention on change of work practice among immigrant cleaners. *Am J Ind Med*. 2011;54(11):872–84.
 31. Cediel N, Conte V, Tomassone L, Tiberti D, Guiso P, Romero J et al. Risk perception about zoonoses in immigrants and Italian workers in northwestern Italy. *Rev Saude Publ*. 2012;46(5):850–7.

32. Hoppe A. Psychosocial working conditions and well-being among immigrant and German low-wage workers. *J Occup Health Psychol.* 2011;16(2):187–201.
33. Chodick G, Ashkenazi S, Livni G, Lerman Y. Increased susceptibility to varicella-zoster virus among Israeli physicians and nurses born in the Middle-East region. *J Occup Health.* 2006;48(4):246–52.
34. Lakasing E, Mirza ZA. The health of Britain's Polish migrants: a suitable case for history taking and examination. *Br J Gen Pract.* 2009;59(559):138–9.
35. Burns FM, Mercer CH, Evans AR, Gerry CJ, Mole R, Hart GJ. Increased attendances of people of eastern European origin at sexual health services in London. *Sex Transm Dis.* 2009;85(1):75–8.
36. Leaman AM, Rysdale E, Webber R. Use of the emergency department by Polish migrant workers. *Emerg Med J.* 2006;23(12):918–19.
37. Steele S, Stuckler D, McKee M, Pollock AM. The Immigration Bill: extending charging regimes and scapegoating the vulnerable will pose risks to public health. *J R Soc Med.* 2014;107(4):132–3.
38. Huffman SA, Veen J, Hennink MM, McFarland DA. Exploitation, vulnerability to tuberculosis and access to treatment among Uzbek labor migrants in Kazakhstan. *Soc Sci Med.* 2012;74(6):864–72.
39. Zermiani M, Frighetto R, Galvan U, Cruciali M, Serpelloni G. Counselling and screening for sexually transmitted diseases in a cohort of prostitutes in the north-east of Italy. *Infection.* 2010;38:69.
40. Stulhofer A. HIV related risks among Croatian migrant workers 2004–2006. *AIDS Care.* 2008;20(3):361–9.
41. Meardi G, Martin A, Riera ML. Constructing uncertainty: unions and migrant labour in construction in Spain and the UK. *J Ind Relat.* 2012;54(1):5–21.
42. Rasmussen CD, Jorgensen MB, Carneiro IG, Flyvholm MA, Olesen K, Sogaard K et al. Participation of Danish and immigrant cleaners in a 1-year worksite intervention preventing physical deterioration. *Ergonomics.* 2012;55(2):256–64.
43. Agudelo-Suarez A, Gil-Gonzalez D, Ronda-Perez E, Porthe V, Paramio-Perez G, Garcia AM et al. Discrimination, work and health in immigrant populations in Spain. *Soc Sci Med.* 2009;68(10):1866–74.

- 
44. Czapka E. The health of new labour migrants: Polish migrants in Norway. In: Ingleby D, Krasnik A, Lorant V, Razum O, editors. Health inequalities and risk factors among migrants and ethnic minorities. Antwerp: Garant; 2012:150–62 (COST series on Health and Diversity).
 45. Mock-Munoz de Luna C, Ingleby D, Graval E, Krasnik A. Training packages for health professionals to improve access and quality of health services for migrants and ethnic minorities, including the Roma. Copenhagen: University of Copenhagen; 2015 (http://www.mem-tp.org/pluginfile.php/1104/mod_resource/content/1/ANEXO%201.pdf, accessed 21 June 2015).
 46. OECD statistics: database on immigrants in OECD countries: Paris: Organisation for Economic Co-operation and Development; 2015 (http://stats.oecd.org/Index.aspx?DataSetCode=MIG_NUP_RATES_GENDER, accessed 1 August 2015).
 47. Ahonen EQ, Benavides FG, Benach J. Immigrant populations, work and health: a systematic literature review. *Scand J Work Environ Health*. 2007;33(2):96–104.
 48. Priebe S, Sandhu S, Dias S, Gaddini A, Greacen T, Ioannidis E et al. Good practice in health care for migrants: views and experiences of care professionals in 16 European countries. *BMC Public Health*. 2011;11:187.
 49. Dzurova D, Winkler P, Drbohlav D. Immigrants' access to health insurance: no equality without awareness. *Int J Environ Res Public Health*. 2014;11(7):7144–53.
 50. Keygnaert I, Dialmy A, Manco A, Keygnaert J, Vettenburg N, Roelens K et al. Sexual violence and sub-Saharan migrants in Morocco: a community-based participatory assessment using respondent driven sampling. *Global Health*. 2014;10.
 51. Ronda E, Agudelo-Suarez AA, Garcia AM, Lopez-Jacob MJ, Ruiz-Frutos C, Benavides FG. Differences in exposure to occupational health risks in Spanish and foreign-born workers in Spain (ITSAL Project). *J Immigr Minor Health*. 2013;15(1):164–71.
 52. Hnilicová H, Dobiášová K. Migrants' health and access to healthcare in the Czech Republic. *Cent Eur J Public Health*. 2011;19(3):134–8.
 53. Pollock KGJ, Mellor DJ, Browning LM, Wilson L, Donaghy M. Q fever in migrant workers, Scotland. *Emerg Infect Diseases*. 2007;13(12):1963–4.

54. Households as employer: working conditions and job quality. Eurofound Working Conditions Survey. Dublin: European Foundation for the Improvement of Living and Working Conditions (Eurofound); 2008.
55. Woolfson C. Labour standards and migration in the New Europe: post-communist legacies and perspectives. *Eur J Ind Rel.* 2007;13(2):199–218.
56. MIPEX. Migrant integration policy index (<http://www.mipex.eu>, accessed 29 July 2015).
57. Boidi M, El-Nagashi F, Karner B. Sex work, migration, health: a report on the intersections of legislations and policies regarding sex work, migration, and health in Europe. In: Boidi M, El-Nagashi F, Karner B, editors. TAMPEP 8 programme. Hamburg: European Network for HIV/STI Prevention and Health Promotion among Migrant Sex Workers (TAMPEP); 2009.
58. Mor Z, Kolb H, Lidji M, Migliori G, Leventhal A. Tuberculosis diagnostic delay and therapy outcomes of non-national migrants in Tel Aviv, 1998–2008. *Eurosurveillance.* 2013;18(12):pii: 20433.
59. Agyemang C, van Oeffelen AA, Norredam M, Kappelle LJ, Klijn CJ, Bots ML et al. Socioeconomic inequalities in stroke incidence among migrant groups: analysis of nationwide data. *Stroke.* 2014;45(8):2397–403.
60. Borrell C, Muntaner C, Sola J, Artazcoz L, Puigpinos R, Benach J et al. Immigration and self-reported health status by social class and gender: the importance of material deprivation, work organisation and household labour. *J Epidemiol Community Health.* 2008;62(5):e7.
61. Topa J, Neves S, Nogueira C. Immigration and health: women immigrants' (in) ability to access health care. *Saude Soc.* 2013;22(2):328–41.
62. Peiro MJ, Benedict R. Migration health: better health for all in Europe. Brussels: International Organization for Migration, Migration Health Department; 2009.
63. Zermiani M, Mengoli C, Rimondo C, Galvan U, Cruciani M, Serpelloni G. Prevalence of sexually transmitted diseases and hepatitis C in a survey of female sex workers in the north-east of Italy. *Open AIDS J.* 2012;6(1):60–4.
64. Zimmerman C, Kiss L, Hossain M. Migration and health: a framework for 21st century policy-making. *PLoS Med.* 2011;8(5):e1001034.

- 
65. Newall D, Phillimore J, Sharpe H. Migration and maternity in the age of superdiversity. *Pract Midwife*. 2012;15(1):20–2.
 66. Buchan J, Wismar M, Glinos IA, Bremner J, editors. Health professional mobility in a changing Europe: new dynamics, mobile individuals and policy diverse responses. The European Observatory on Health Systems and Policies. World Health Organization. 2014. (http://www.euro.who.int/__data/assets/pdf_file/0006/248343/Health-Professional-Mobility-in-a-Changing-Europe.pdf?ua=1, accessed 6 August 2015).
 67. ILO background note: the contribution of labour migration to improved development outcomes. Mainstreaming of migration in development policy and integrating migration in the post-2015 UN Development Agenda. Geneva: International Labour Organization; 2015 (http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---migrant/documents/genericdocument/wcms_220084.pdf, accessed 5 August 2015).
 68. Migrant labour, London: Encyclopaedia Britannica; 2015 (<http://www.britannica.com/topic/migrant-labour>, accessed 5 August 2015).

ANNEX 1. SEARCH STRATEGY

Databases

The searches were performed on 26 February 2015. The databases of MEDLINE, Embase, Applied Social Sciences Index and Abstracts (ASSIA), EconLit, and Social Sciences Citation Index were used for the scholarly literature. The websites of the following organizations were consulted in order to find grey literature and current statistics: International Organization for Migration (IOM); International Labour Organization (ILO); United Nations Refugee Agency and Department of Economic and Social Affairs; World Health Organization (WHO); Migration Policy Institute; Centre for Research in Occupational Health; European Commission Directorate-General for Migration and Home Affairs; Evaluating the Impact of Structural Policies on Health Inequalities and their Social Determinants, and Fostering Change (SOPHIE); Migrant Integration Policy Index; Organisation for Economic Co-operation and Development (OECD); European Public Health Association; and European Observatory.

Search terms

Screening was conducted by two reviewers on the basis of characteristics of migrants, recipient country, characteristics of the policies, implementation of the policies, evidence of success or failure of policies, and possible policy implications. Any disagreements were solved by a discussion and consultation with a third reviewer if needed.

Because of the heterogeneity in the type of studies, quality was assessed based on relevance to the research question. As no study explicitly sought to evaluate the success of a policy in terms of reducing inequalities in accessibility and quality of health care delivery, the methodologies of the studies were in most cases not relevant. All studies did present varying levels of evidence for policy recommendations or policy analysis. The following hierarchy of studies was used to evaluate quality:

- study described specific policy/intervention and had evidence on success;
- study described specific policy/intervention and implied information on success;
- study described specific policy/intervention but had no assessment of success;



- study had policy/intervention recommendation based on some experimental results;
- study had policy/intervention recommendation without any experimental basis.

The search strategy¹ examined the terms “labour migrants”, “European Region”, “policies and interventions” and “health care”.

Target population

The search was expanded to include terms referring to the broader aspect of labour and economic migration, using the following free text terms: “ethnic minorities”, “occupational safety”, “insurance”, “agriculture”, “manufacture”, “domestic”, “construction”, “mining”, “restaurant”, “catering” and “hotel”.

Intervention

To be sure that the search strategy covered any aspect of the intervention in the health care system, the following MeSH terms were used in MEDLINE and Embase databases: “delivery of health care”, “health services accessibility”, “health policy” and “health care system”, “health care policy”, “health care access”, “health care planning”, “health care program” and “health care delivery”. In addition, the authors expanded the search using the following free text terms: “policy”, “intervention”, “law”, “program”, “service”, “reform”, “access”, “planning” and “delivery”.

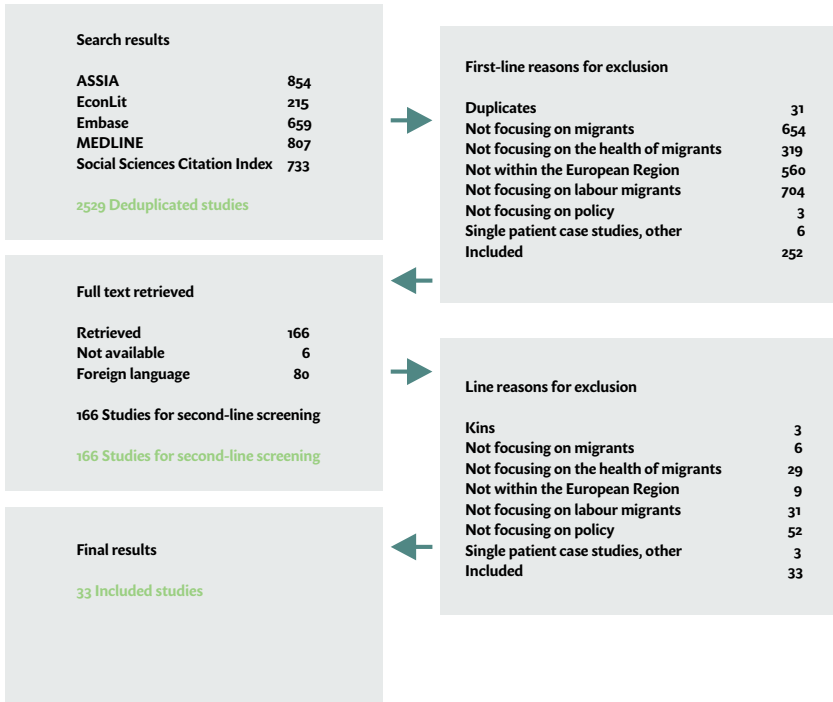
Country search strategy

Both official and informal names of the 53 countries of the WHO European Region and derivative words were used: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Europe, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Marino, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan.

Fig. A1. illustrates the selection of studies.

1. The authors would like to thank Brigitte Wildner, Information Retrieval Specialist, for her assistance in the construction of the search strategy.

Fig. A1. Flowchart for selection of studies



Ovid MEDLINE(R) in-process and other non-indexed citations and Ovid MEDLINE(R) <1946 to present>

1. exp Europe/ or exp Asia, Central/ or exp Israel/ or turkey.mp
2. exp "Transients and Migrants"/
3. exp Health Policy/ or exp intervention studies/ or exp delivery of health care/ or exp health services accessibility/
4. (policy or policies or intervention* or law or laws or program* or service* or reform* or access* or planning or delivery).ab,ti.

5. ((migrant* or migration or immigra* or foreign* or (minority adj3 group*) or minorities or ethnic or transient*) adj6 (labour or labor or work* or job or employ* or economic or "occupational safety" or insurance or agricultur* or manufactur* or domestic or construction or mining or restaurant or catering or hotel)).ab,ti.

6. 1 and (2 or 5) and (3 or 4)

7. 6 and 2005:2015.(sa_year)

Results: 807

Embase <1988 to 2015 Week 08>

8. migrant worker/

9. ((migrant* or migration or immigra* or foreign* or (minority adj3 group*) or minorities or ethnic or transient*) adj6 (labour or labor or work* or job or employ* or economic or "occupational safety" or insurance or agricultur* or manufactur* or domestic or construction or mining or restaurant or catering or hotel)).ti,ab.

10. exp kazakhstan/ or exp kyrgyzstan/ or exp tajikistan/ or exp turkmenistan/ or exp uzbekistan/ or exp europe/ or exp israel/ or turkey.mp.

11. exp health care system/ or exp health care policy/ or exp health care access/ or exp health care planning/ or exp health care program/ or exp health care delivery/

12. (policy or policies or intervention* or law or laws or program* or service* or reform* or access* or planning or delivery).ti,ab.

13. (1 or 2) and 3 and (4 or 5)

14. 6 and 2005:2015.(sa_year)

Results: 807

Social Sciences Citation Index (from Web of Science Core Collection)

TOPIC: ((country search strategy)) AND TOPIC: (((migrant* OR migration OR immigra* OR foreign* OR (minority near groups) OR minorities OR ethnic OR transient*)) near ((labour OR labor OR labor OR work* OR job OR employ* OR economic OR "occupational safety" OR insurance OR agricultur* OR manufactur* OR domestic OR construction OR mining OR

restaurant OR catering OR hotel))) AND TOPIC: ((policy OR policies OR intervention* OR law OR laws OR program* OR service* OR reform* OR access* OR planning OR delivery)) AND TOPIC: (health OR medical)

Timespan: 2005–2015

Results: 733

ASSIA

((ab,ti((migrant* OR migration OR immigrant* OR foreign* OR (minority group*) OR minorities OR ethnic OR transient*) AND (labour OR labor OR work* OR job OR employ* OR economic OR “occupational safety” OR insurance OR agriculture* OR manufacture* OR domestic OR construction OR mining OR restaurant OR catering OR hotel)) AND ab,ti(policy OR policies OR intervention* OR law OR laws OR program* OR service* OR reform* OR access* OR planning OR delivery) AND ab,ti(health OR medical)) OR SU.exact(“MIGRANT WORKERS”)) AND (country search strategy) after 2004

Results: 854

EconLit

((ab,ti((migrant* OR migration OR immigrant* OR foreign* OR (minority group*) OR minorities OR ethnic OR transient*) AND (labour OR labor OR work* OR job OR employ* OR economic OR “occupational safety” OR insurance OR agriculture* OR manufacture* OR domestic OR construction OR mining OR restaurant OR catering OR hotel)) AND ab,ti(policy OR policies OR intervention* OR law OR laws OR program* OR service* OR reform* OR access* OR planning OR delivery) AND ab,ti(health OR medical)) OR SU.exact(“MIGRANT WORKERS”)) AND (country search strategy)

Results: 215



ANNEX 2. DEFINITIONS OF LABOUR MIGRANTS

Labour migrants in this report are considered to be those seeking work or employed in the host country, or previously seeking work or employed but unable to continue working and remaining in residence in the host country irrespective of their documentation. In terms estimating how many migrants are labour migrants, some use legal status, some use motivation, and others general employment (10). The following definitions relevant to labour migrants are provided by key international organizations.

International Organization for Migration

The International Organization for Migration (IOM) differentiates economic migrants from labour migrants (6). It defines several subgroups of migrant worker, including business travellers, contract migrant workers, established migrant workers, highly skilled migrant workers, immigrating investors, project-tied workers, seasonal migrant workers, and temporary migrant workers.

“Labour migrants” are defined as those who move for the purpose of employment.

“Economic migrants” form a potentially broader group that includes people entering a state to perform economic activities, such as investors or business travellers, but can be understood also in a narrower sense similar to the category of “labour migrants”.

International Labour Organization

A “migrant worker” is defined in the International Labour Organization (ILO) instruments as a person who migrates from one country to another (or who has migrated from one country to another) with a view to being employed other than on his own account, and includes any person regularly admitted as a migrant for employment (6,67).

United Nations

The United Nations Convention on the Protection of the Rights of all Migrant Workers and Members of their Families defines a migrant worker as a person who

is to be engaged, is engaged or has been engaged in a remunerated activity in a state of which he or she is not a citizen (6).

The United Nations Population Division defines irregular migrants (or undocumented migrants) as individuals who enter a country often in search of employment without the required documents or permits, or who overstay the authorized length of stay in the country (64).

Encyclopaedia Britannica

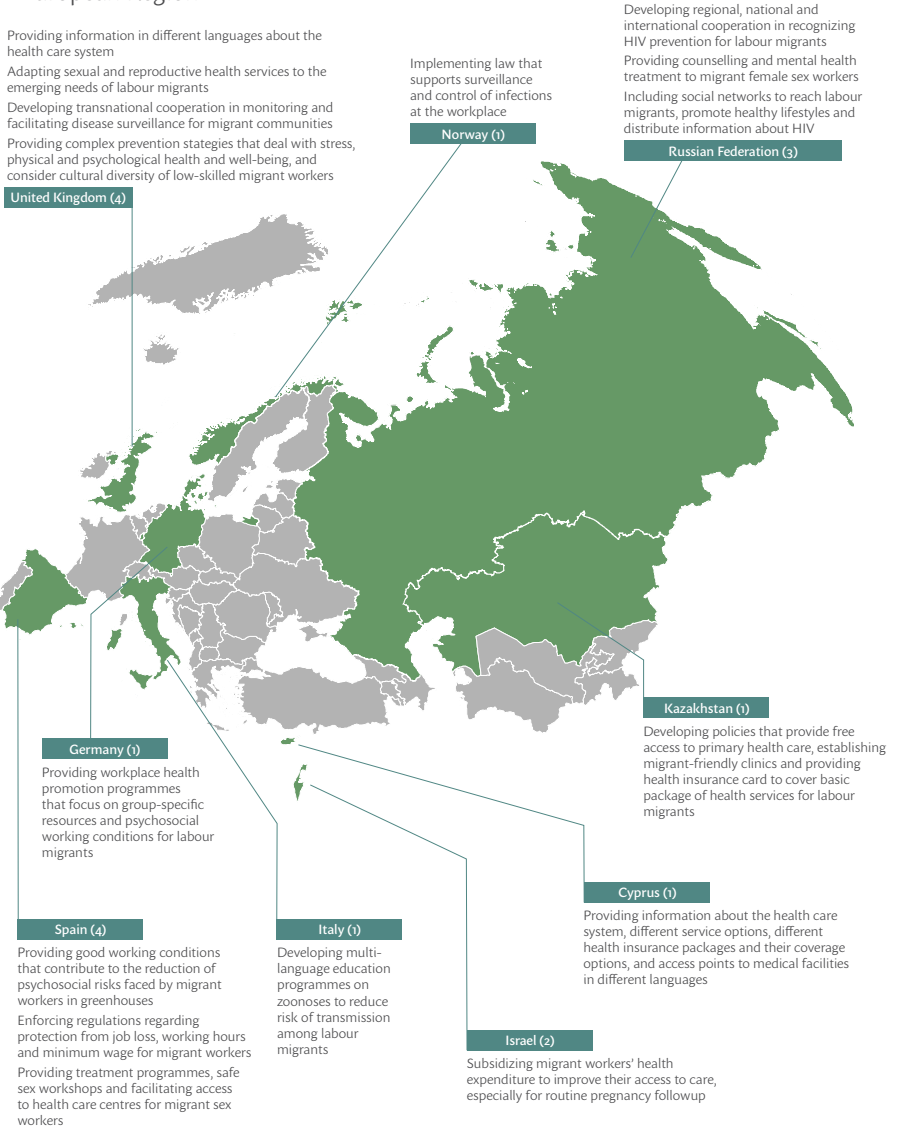
The *Encyclopaedia Britannica* defines migrant labour as casual and unskilled workers who move about systematically from one region to another offering their services on a temporary, usually seasonal basis (68).



ANNEX 3. POLICY/INTERVENTION OPTIONS TARGETING LABOUR MIGRANTS IN THE WHO EUROPEAN REGION

Fig. A3 shows policy/intervention options targeting labour migrants in the WHO European Region that were identified in the peer-reviewed literature in English.

Fig. A3. Policy/intervention options targeting labour migrants in the WHO European Region





World Health Organization

Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark

Tel.: +45 45 33 70 00

Fax: +45 45 33 70 01

Email: contact@euro.who.int

Website: www.euro.who.int

ISBN 978-92-890-5109-5



9 789289 051095 >