

## HEALTH EVIDENCE NETWORK SYNTHESIS REPORT 47

# Public health aspects of mental health among migrants and refugees: a review of the evidence on mental health care for refugees, asylum seekers and irregular migrants in the WHO European Region

Stefan Priebe | Domenico Giacco | Rawda El-Nagib



REGIONAL OFFICE FOR

**World Health  
Organization**

**Europe**

This HEN – the Health Evidence Network – synthesis report is the result of cross-divisional work in the Regional Office between the Migration and Health programme in the Division of Policy and Governance for Health and Well-being, the Mental Health and Mental Disorders programme of the Division of Noncommunicable Diseases and Promoting Health through the Life-course, the Evidence and Information for Policy-making Unit of the Division of Information, Evidence, Research and Innovation, and the Department of Mental Health and Substance Abuse, WHO headquarters.

## **The Health Evidence Network**

HEN is an information service for public health decision-makers in the WHO European Region, in action since 2003 and initiated and coordinated by the WHO Regional Office for Europe under the umbrella of the European Health Information Initiative (a multipartner network coordinating all health information activities in the European Region).

HEN supports public health decision-makers to use the best available evidence in their own decision-making and aims to ensure links between evidence, health policies and improvements in public health. The HEN synthesis report series provides summaries of what is known about the policy issue, the gaps in the evidence and the areas of debate. Based on the synthesized evidence, HEN proposes policy options, not recommendations, for further consideration of policy-makers to formulate their own recommendations and policies within their national context.

### **The Health Evidence Network and the Migration and Health programme of the WHO Regional Office for Europe**

At the fifth meeting of the WHO European Advisory Committee on Health Research (EACHR), which took place in July 2004, EACHR agreed to form a subcommittee on migration and health to review the strategic framework of the work of the WHO Regional Office for Europe on migration and health, and to commission a series of HEN synthesis reports targeting policy-makers. In 2015, three HEN reports were published, tackling the challenges of three distinct migrant groups: irregular migrants, labour migrants, and refugees and asylum seekers.

In 2016, three new HEN reports are being published, aimed at synthesizing the available evidence in order to improve policy-makers' understanding of the following specific issues related to migration: maternal health, mental health and the public health implications of the different definitions available for migrants.

The various HEN reports on migration and health have been used as an evidence base for the development of the Strategy and Action Plan for Refugee and Migrant Health in the WHO European Region.

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Health Evidence Network synthesis report 47

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## Abstract

The increasing number of refugees, asylum seekers and irregular migrants poses a challenge for mental health services in Europe. This review found that these groups are exposed to risk factors for mental disorders before, during and after migration. The prevalence rates of psychotic, mood and substance use disorders in these groups are variable but overall are similar to those in the host populations; however, the rates of post-traumatic stress disorder in refugees and asylum seekers are higher. Poor socioeconomic conditions are associated with increased rates of depression five years after resettlement. These groups encounter barriers to accessing mental health care. Good practice for mental health care includes promoting social integration, developing outreach services, coordinating health care, providing information on entitlements and available services, and training professionals to work with these groups. These actions require resources and organizational flexibility.

### Keywords

ASYLUM SEEKERS, EUROPE, IRREGULAR MIGRANTS, MENTAL HEALTH, MENTAL HEALTH SERVICES, PUBLIC HEALTH, REFUGEES, UNDOCUMENTED MIGRANTS

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## ABBREVIATIONS

ASSIA	Applied Social Sciences Index and Abstracts
CABI	Centre for Agriculture and Biosciences International
EU	European Union
NGO	nongovernmental organization
PTSD	post-traumatic stress disorder
UNHCR	United Nations High Commissioner for Refugees



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## FOREWORD

*We live in an increasingly diverse world in which migration is both a current issue and one for the years to come. The growth in migrant numbers arriving in Europe creates challenges that require a rapid humanitarian response and put pressure on health systems.*

*To address this priority, the WHO Regional Office for Europe established the Public Health Aspects of Migration in Europe (PHAME) project in 2012 with the financial support of the Ministry of Health of Italy, which is developing in 2016 into a programme with the aims of (i) providing ad hoc technical assistance to Member States of the WHO European Region, (ii) strengthening health information and available evidence on this, (iii) promoting advocacy and sharing of information among Member States and partners, and (iv) supporting migration-sensitive health policy development. The overall PHAME programme objectives would be to strengthen health system capacities in order to meet the health needs of mixed influxes of refugees and migrants, and of host populations; promote immediate health intervention; ensure migrant-sensitive health policies; improve the quality of the health services delivered; and optimize use of health structures and resources in host countries.*

*A high level meeting to discuss strengthening of cooperation between countries and regions brought together 50 countries from three different regions and a great diversity of United Nations agencies and international organizations in November 2015. The outcome document, Stepping up action on refugee and migrant health. Towards a WHO European framework for collaborative action, summarized the policy and strategic implications of the public health priorities, challenges and needs identified through the meeting discussions for European national health policies and systems.*

*It is often been noted that the health of refugees and migrants is generally similar to that of their host populations. However, the physical and mental effects of leaving their home countries and the long arduous journeys they undertake increase their overall health risks and may worsen their health conditions.*

*In 2014, the European Advisory Committee on Health Research recommended that the Secretariat commission a series of Health Evidence Network (HEN) synthesis reports with the aim of supporting public health policy-makers to use the best available evidence*

*in their own decision-making. The HEN synthesis reports summarize what is known about the policy issue, the gaps in evidence, the areas of debate and the policy options.*

*In 2015, three HEN synthesis reports were published focusing on access to and quality of health services among irregular migrants, labour migrants, and refugees and asylum seekers. These reports identified the need for additional research and evidence, the development of evidence-informed policies on migrant health and new approaches to improving migrants' health outcomes. The HEN reports built an evidence base for the development and implementation of the strategy and action plan on refugee and migrant health in the WHO European Region, to be submitted for Member States approval at the 66th session of the WHO Regional Committee for Europe.*

*The HEN series on refugee and migrant health now focuses on specific issues, including maternal health, mental health and the definitions of migrants in the context of public health, which will provide decision-makers with health system policy options on migrant health to support them in working towards better health for migrants in the WHO European Region.*

**Zsuzsanna Jakab**  
**WHO Regional Director for Europe**



# SUMMARY

## The issue

Around 77 million international migrants are estimated to live in the WHO European Region. Among them, the proportion of those migrating because of violation of their human rights, persecution and conflict is increasing. In 2015, 1.2 million first-time asylum applications were made in the European Union (EU) Member States alone. There is a need to identify good practice for mental health care provision for these individuals.

## The synthesis question

The objective of this report is to synthesize research findings from a systematic review of available academic and grey literature to address the following question. What is the evidence on policies and interventions that improve mental health care for refugees, asylum seekers and irregular migrants?

## Types of evidence

The evidence was obtained from the academic and grey literature published in English or Russian. This review identified 69 papers in which refugees, asylum seekers and irregular migrants in at least one of the countries in the WHO European Region formed part or all of the population studied. European and national policy documents were also considered.

## Results

Risk factors for developing mental disorders are encountered by refugees, asylum seekers and irregular migrants before, during and after migration. Before migration, they may be exposed to persecution, traumatic conflict experiences and economic hardship. During migration they can experience physical harm and separation from family members. After migration, poor socioeconomic conditions (i.e. social isolation and unemployment) are the main factors associated with poor mental health outcomes for refugees. Asylum seekers and irregular migrants can also face uncertainty about asylum applications and detention.

The prevalence of mental disorders among refugees, asylum seekers and irregular migrants is variable across studies. Differences in findings may be due to the characteristics of the studied groups; the type and level of risk factors that the

groups had been exposed to; and the socioeconomic conditions, mental health provision and social support in the host country. Findings are also influenced by the research methodology used in the studies.

In general, the rates of psychotic, mood and substance use disorders in these groups appear similar to those found in host countries. An exception is post-traumatic stress disorder (PTSD), which is more common in refugees and asylum seekers.

The prevalence of depression in refugees at more than five years of resettlement is higher than in the corresponding host country population. This has been linked to adverse postmigratory socioeconomic conditions. A study in Sweden also found a higher incidence of psychotic disorders in refugees compared with the host population and non-refugee migrants.

Barriers encountered by refugees, asylum seekers and irregular migrants in accessing mental health care included:

- a lack of knowledge regarding their health care entitlements and of the health care systems in the host country;
- poor command of the language of the host country;
- belief systems and cultural expectations for health care that differ from those in the host country; and
- a lack of trust in professionals and authorities.

Good practice may reduce barriers to mental health care and facilitate effective treatment when needed. Identified good practice included:

- supporting social integration through education, housing and employment;
- providing outreach services to facilitate access to care;
- coordinating different services within a health care system to ensure the integration of physical and mental health care and appropriate care pathways;
- providing information on care entitlements and available services both to people from these groups and to professionals; and
- training health care professionals to ensure that they are open towards these groups, aware of the barriers to accessing care and engaging with services, and skilled in overcoming language problems.

European policies support the principle of granting access to health care to these groups. However, national policies vary with respect to which entitlements to care



are granted to each group and whether initiatives to reduce barriers to accessing care are promoted.

No routine documentation systems on mental health care use and outcomes for refugees, asylum seekers and irregular migrants were found. Evaluations of initiatives to reduce barriers to care were based on the experience of professionals and were explored using qualitative or quantitative methods. So far, there have been no reports of systematic evaluations of clinical outcomes or of experimental studies.

## Policy considerations

In order to support policy-makers in strengthening or introducing specific policies regarding mental health care for these migrant groups and to facilitate good practice, the following policy options are suggested:

- promoting the social integration of these groups to help to prevent the occurrence of new mental disorders and to improve the outcomes of pre-existing ones;
- mapping existing outreach services and establishing them where required to facilitate access to mental health care;
- ensuring strong links between different services and uncomplicated administrative procedures for appropriate referrals and pathways;
- providing information on health care entitlements and available services both to people from these groups and to professionals;
- providing training to professionals to increase their awareness of the barriers these groups face and to ensure skills in engaging and working with them; and
- creating methods to overcome language barriers.

To implement these policy options, resources are required for outreach services, information services, training of professionals, interpretation programmes and initiatives for social integration. Coordination and organizational flexibility are required to integrate physical and mental health care and to facilitate appropriate referrals and care pathways.

Future research should evaluate the effectiveness and cost-effectiveness of service models to implement good practice and assess the long-term care pathways available for refugees, asylum seekers and irregular migrants.





# 1. INTRODUCTION

## 1.1. Background

### 1.1.1. The scale of the problem

Increasing numbers of people are leaving their homelands because of human rights violations, persecution and conflict (1). The WHO European Region is now the largest host of people who migrate for these reasons. It comprises 53 Member States with diverse socioeconomic and environmental conditions. Geographically, the Region spans two continents and has Member States in six geographical subregions: central Asia, eastern Europe, northern Europe, southern Europe, western Asia and western Europe (2).

The WHO European Region saw an increase of 1.3 million international migrants per year from 2000 until 2015. In 2015, 76 million refugee groups were residing in Europe, making up 10% of the overall population (3). In 2014, the United Nations High Commissioner for Refugees (UNHCR) reported that 1.7 million people worldwide submitted asylum or refugee status applications (1). In 2015, 1.2 million people submitted asylum applications in the EU Member States alone; this was more than double the number of applications in the previous year (4). Recipients of the greatest number of asylum applications within the WHO European Region were the Russian Federation (274 700 applications), Germany (172 100 applications) and Turkey (87 800 applications) (1).

The arrival of such high numbers of people in a short period of time places substantial pressure on the societies and organizations of host countries across the Region, including mental health care systems (5,6). Migrants are exposed to various risk factors for mental disorders and often encounter barriers to accessing appropriate care (5,6). These problems are usually greater for refugees, asylum seekers and irregular (also defined as undocumented) migrants. In most countries and at most points of time, other groups of migrants – such as people who have moved country within the EU or students and labour migrants from all parts of the world – are larger in number than the group of refugees, asylum seekers and irregular migrants. Yet, the risk factors, social disadvantages and limitations to health care are much more marked for refugees, asylum seekers and irregular migrants, and this leads to particular challenges for health care systems. Identifying the mental health risk factors and barriers to care specifically experienced by these migrant groups,

as well as good practice models, may help in designing and implementing policies to provide effective mental health care.

## 1.2. Scope of the evidence synthesis

This report has examined the evidence available on policies and interventions that improve mental health care for refugees, asylum seekers and irregular migrants in order to support the Member States of the WHO European Region in providing the most effective mental health care for these groups and in reducing inequalities in access to and outcomes of care.

A scoping review was performed and evidence from academic and grey literature was synthesized on:

- premigration, perimigration and postmigration factors that may be associated with poor mental health and/or access to care;
- the prevalence of mental and substance use disorders in refugees, asylum seekers and irregular migrants in the WHO European Region;
- barriers to accessing mental health care services for these populations;
- good practice in mental health care for these populations; and
- policies and outcomes considered to monitor improvements in access and delivery of care for these populations.

### 1.2.1. Migrant groups considered

The three groups considered in this review are defined by their legal status. Different and partially inconsistent definitions of these groups exist. For the purpose of this report we will use the following working definitions.

A **refugee** is an individual who “owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country” (7,8).

An **asylum seeker** is an individual who is seeking international protection and sanctuary in a country other than the one of his or her usual settlement. “In countries with individualized procedures, an asylum-seeker is someone whose claim has not yet been finally decided on by the country in which he or she has submitted it. Not every asylum-seeker will ultimately be recognized as a refugee, but every refugee is initially an asylum-seeker” (8).





An **irregular migrant** is “an “an individual who does not have a residence permit entitling regular stay in a host country. This may be due to irregular entry into the country, overstaying their visa or an unsuccessful asylum application” (9).

Refugees and asylum seekers migrate because they have experienced risks to their lives and human rights, such as through persecution or armed conflicts. They often do not have the opportunity to plan the conditions of their migration or their final destination. Moreover, they may be prevented from returning to their home country unless the situation that forced them to leave has improved (7,8). Irregular migrants may have similar reasons for migration as refugees and asylum seekers, or they may have different reasons (e.g. economic reasons). However, unlike refugees, they do not have entitlement to stay in the host country and often have more limited access to health care (10). Moreover, asylum seekers and irregular migrants face the possibility of being forcibly detained and deported (11).

This report addresses mental health care for all three migrant groups. Compared with other types of migrant (e.g. labour migrants), their background, characteristics and status can lead to different and more marked barriers for accessing and engaging with health care (5,6). Each of the three groups may also have different entitlements for accessing health care.

## 1.3. Methodology

### 1.3.1. Sources for the review

The report is compiled from literature found by a keyword search of the Applied Social Sciences Index and Abstracts (ASSIA), Centre for Agriculture and Biosciences International (CABI) Global Health, Cochrane Library, Excerpta Medica, PubMed and Social Sciences Citation Index databases. Grey literature, including current statistics and relevant information within national health policies in European countries, was identified by a focused search using Google, Google Scholar and OpenGrey; hand searches of the websites of nongovernmental organizations (NGOs), such as the International Organization for Migration and UNHCR, and the Migrant Integration Policy Index database; personal contacts with key experts to aid identification of relevant papers and documents; and a visit to an immigration removal centre to explore the experiences of professionals working directly with asylum seekers.

### 1.3.2. Data extraction

All papers reporting primary or secondary research data, quantitative and qualitative studies, systematic reviews and other documents were considered eligible for inclusion if they were published before 16 May 2016, referred to WHO European Region Member States or policies developed within this Region, and contained information on any of the following topics:

- the mental health status of refugees, asylum seekers and/or irregular migrants;
- risk factors for mental disorders in these groups;
- delivery of mental health care to these groups;
- measures used to assess mental health care delivery to these groups; and
- policies referring to the access to and provision of mental health care for these groups.

Papers published in English or Russian were searched. English is the most common language used in the scientific literature and Russian is spoken by almost 300 million people as either their native language or on a regular basis in 16 of the 53 countries of the WHO European Region. Publications originating from these countries are often published only in Russian and they can be difficult to access for the rest of the world.

Annex 1 outlines the literature search and screening process, based on the PRISMA statement (12). Papers and policy documents that did not specifically mention refugees, asylum seekers or irregular migrants and health care were excluded.

A total of 5404 studies were found after removal of any duplicates. Following screening, 69 studies were included (5,6,11,13–78). These covered 28 of the 53 countries of the WHO European Region. Annex 2 provides information on the studies included in this evidence synthesis, including the geographical coverage.

### 1.3.3. Data analysis

Owing to the different methodologies and diagnostic criteria adopted in the selected studies, and considering that two systematic reviews and meta-analyses were recently published (13,14), a formal meta-analysis of the prevalence of different mental disorders was not performed. Common themes relating to risk factors for mental health, good practice, policies and considered outcomes were identified through a content analysis of relevant scientific papers, policy documents and specialized websites (10). Analyses of qualitative data are reported narratively.



## 2. RESULTS

### 2.1. Risk factors for mental disorders in refugees, asylum seekers and irregular migrants

Risk factors for mental disorders may be experienced before migration (premigration), during migration (perimigration) and/or after resettlement in the host country (postmigration) (11).

The available literature does not allow for a clear distinction between the three migrant groups considered: refugees, asylum seekers and irregular migrants. However, some postmigration factors are specific to asylum seekers and irregular migrants, such as uncertainty regarding an asylum application and potential detention in an immigration removal centre.

The literature largely focuses on the risk factors for mental disorders and the negative consequences of migration. However, potentially positive consequences have also been considered. The concept of adaptive growth reflects the notion that many refugees, asylum seekers and irregular migrants not only survive all the stressful events before, during and after migration but may also benefit from their experiences and the new opportunities in the host country so that they emerge more resilient to, and less prone to, mental disorders (15).

#### 2.1.1. Premigration risk factors

In their countries of origin, refugees, asylum seekers and irregular migrants may have experienced persecution, armed conflicts and/or economic hardship.

Persecution for political, ethnic, religious or other reasons may involve torture, imprisonment, witnessing the death of family members and/or the violation of their human rights (16–19). Exposure to conflict may range from witnessing destruction and death at close quarters to having a number of traumatic experiences, including torture and direct combat involvement (20–23,79). In addition, some individuals from refugee populations face extreme economic hardship, including a lack of food, water, shelter and other basic needs and resources (23,24).

#### 2.1.2. Perimigration risk factors

The process of migration can involve physical harm, including sexual violence, infectious diseases, extortion and human trafficking. Migrants may be exposed to

life-threatening conditions while crossing seas in unsafe boats, being enclosed in trains or trucks or travelling on foot across unsafe land routes (25,26).

Moreover, migration may mean separation from family members and support networks (24). This is a particular concern for child and adolescent refugees (11).

### 2.1.3. Postmigration risk factors

Once resettled in the host country, refugees, asylum seekers and irregular migrants may encounter other risk factors for mental disorders. In some cases, the procedures for their asylum applications are lengthy, leaving them in a constant state of uncertainty. If an asylum application is unsuccessful or the entitlements for staying in the host country expire, the person may face detention. Even for those recognized as refugees and entitled to stay in the host country, it is often a struggle to fully integrate into society. Major postmigration risk factors are as follows.

- **Uncertainty about the asylum application** is a factor in that legal admission to a host country is often a long and unpredictable process. Asylum seekers who have been in a host country for longer are more likely to have a number of mental health issues, including symptoms of PTSD, depression and anxiety, compared with those who have arrived more recently (27–30).
- **Detention** occurs for many asylum seekers and there is growing evidence that detention may significantly affect the mental health of asylum seekers (11,18,31–33): the longer the length of time held in detention, the greater the deterioration (34). In particular, the damaging effects of detention include PTSD, anxiety, depression and suicidal ideation, as well as suicide (35,80).
- **Reduced social integration** has been studied in refugee populations with particular regard to poor socioeconomic conditions (i.e. social isolation and unemployment) (13,81). These factors have a long-term effect on mental health: in refugees resettled for more than five years in a country, a poor postmigratory socioeconomic situation was associated with a higher likelihood of depression (13,25,36–38). While unemployment is in itself a risk factor for mental disorders (39), it may also hinder full integration into the new environment (40). For example, young refugees with an unemployed parent have experienced hostility, including offensive and demeaning comments from their peers (41).



## 2.2. Prevalence of mental disorders

Research studies have shown substantial variability in the prevalence of mental disorders among refugees, asylum seekers and irregular migrants (13,14,42). For refugees only, there is a meta-analysis suggesting that, in general, the prevalence of mental disorders is not substantially higher than the overall prevalence in host populations (14). An exception is PTSD, which is more frequent in refugees and asylum seekers than in host populations (14,28).

The high variability of findings among studies may reflect true differences in prevalence among different migrant groups and host country contexts. These may occur because the groups have different backgrounds and characteristics, have been exposed to different types and levels of risk factors for mental disorders (summarized in section 2.1) and live in contexts that are more or less supportive within the host country (13,14,82).

However, the findings are also influenced by the methodology used in a study, and the variability of findings can reflect differences in the quality and type of research methods across studies. Overall, studies of higher methodological quality tend to show lower prevalence rates of mental disorders. In particular, the sampling method used is important. When an opportunistic or convenience sample (i.e. a sample in which people have not been randomly selected from a larger population) is used, prevalence rates tend to be higher than when more representative samples are used (13,14,82).

For most studies, it was not possible to report results separately for each of the three migrant groups. In general, studies reporting the prevalence of mental disorders largely focused on refugees. The two largest systematic reviews of the prevalence of mental disorders (Bogic et al.,  $n = 16\ 010$  (13); Fazel et al.,  $n = 6743$  (14)) looked exclusively at refugees. We did not find any systematic reviews of the prevalence of mental disorders specifically focusing on asylum seekers or irregular migrants.

Evidence is particularly limited for irregular migrants, who have rarely been systematically studied. By definition, a number of restrictions affect their access to health care. These, along with the fear of being reported to the authorities by health professionals, complicate both their access to health care and their participation in research studies (43,44).

Most studies have focused on people who had arrived in a host country within the previous five years (i.e. short-term resettlement). These studies are presented

first, followed by the evidence on people resettled for more than five years (i.e. long-term resettlement), since the prevalence of depressive disorders appears to differ between these groups.

### 2.2.1. Psychotic disorders

The largest meta-analysis of data available found that 2% (range, 1–6) of refugees had a psychotic illness (i.e. schizophrenia, schizoaffective disorders, delusional disorders or other psychotic disorders). This was similar to the prevalence within the general population (14). The prevalence of psychotic disorders in asylum seekers was assessed only in clinical samples (i.e. people specifically treated for their mental disorder) (16,31,33) and not in population studies; hence, no prevalence data are available for this migrant group. A survey of the general practice records of irregular migrants found a 1.8% rate of psychotic disorders, which is similar to the rate in the general population (45).

### 2.2.2. Mood disorders

Fazel and colleagues found that 1 in 20 refugees suffered from depression in their sample of 7000 refugees (14). This was not higher than the overall prevalence in the host populations. A large sample ( $n = 598$ ) of asylum seekers in an acceptance centre in Italy had a depression rate of 7.3% (28). A survey of general practice records of irregular migrants in the Netherlands ( $n = 325$ ) showed an 8% incidence (new cases in two years) of depression (45).

Overall, the largest studies suggest that the rates of depression in asylum seekers and irregular migrants are similar to those in the general population (83), and in accordance with the rates Fazel and colleagues reported for refugees (14).

### 2.2.3. Anxiety, stress-related and somatization disorders

The review by Fazel and colleagues showed that 4% of the refugees in their sample were diagnosed with generalized anxiety disorder. This rate was similar to that in the general population of the host countries (14).

In contrast, the prevalence of PTSD in refugees (9%) is higher than estimates for host country populations (1–3%) (14,46). There is evidence that the prevalence of PTSD is even higher in refugees who have been exposed to potentially traumatic experiences (47), in child and adolescent refugees (14) and in asylum seekers. For example, a PTSD prevalence rate of 17% has been reported in asylum seekers (28). However, PTSD rates in irregular migrants seem to be lower (3%) than for other migrants and more similar to populations in the host country.



Comorbidity of PTSD and depression is common: some studies report that as many as 40% of refugees with PTSD also have clinical depression (14).

Somatic symptoms of depression (e.g. fatigue, aches and pains, palpitations, dizziness and nausea) and somatization disorders (recurring, multiple and current clinically significant complaints about somatic symptoms in the absence of a physical explanation) are reported to be common in clinical samples of refugees, asylum seekers and irregular migrants, but no studies assessing the exact prevalence of these symptoms and disorders in these groups are available (48).

#### 2.2.4. Substance use disorders

Most studies on substance use disorders in refugee groups have been conducted outside Europe. Only a few studies have assessed the rates of substance use disorders in population samples of refugees, asylum seekers and irregular migrants (45,49), and they are limited to host countries in western Europe (Germany, Italy, the Netherlands and the United Kingdom). In general, the prevalence rates of substance use disorders (including alcohol-related disorders) among refugees, asylum seekers and irregular migrants tend to become similar to those of host country populations with time, even when they were lower (or higher) immediately after migration (45,49,50).

#### 2.2.5. Mental disorders in refugees resettled for more than five years

Some studies have specifically assessed the prevalence of mental disorders in refugees who have stayed in the host country for more than five years.

A recent systematic review of the rates of mental disorders found that the prevalences of depression and anxiety disorders were higher in refugees resettled for more than five years than in the host populations (13). However, there was high between-study heterogeneity, and the prevalence of mental disorders was somewhat related to both the country of origin and the host country. Consistent predictors of mental disorders included greater exposure to premigration traumatic experiences and postmigration stress.

Exposure to traumatic experiences before or during migration was associated with a diagnosis of PTSD in refugees resettled for more than five years, while depression was associated with postmigration factors such as poorer socioeconomic conditions. When sex was investigated as a moderator variable, the prevalence of depression and unspecified anxiety tended to be higher in women than in men (13).

A large and relatively recent study assessed refugees resettled in western European countries (Germany, Italy and the United Kingdom) more than five years following the conflict in the former Yugoslavia and those who had remained in the area. The prevalence of psychotic disorders in the resettled refugees was 1.3% (49), which is consistent with the previous findings of Fazel and colleagues (14). However, the refugees had higher levels of paranoid ideation and psychoticism (i.e. tough-mindedness, non-conformity, inconsideration, recklessness, hostility, anger and impulsiveness) (84) compared with a parallel cohort of people who stayed in the area following the conflict (23). The same study assessed the rates of substance use disorders in the resettled refugees (49). Substantial differences were observed between countries: 11.8% of refugees in Germany had any substance use disorder, compared with 1.7% in England and 0.7% in Italy; 4.7% of refugees in Germany had alcohol dependence, compared with 0.7% in England and 0.3% in Italy. This suggests that substance use patterns may be influenced by social norms in the host country (50).

The higher prevalence rates of some mental disorders (depression and PTSD) in refugees after resettlement for more than five years may be due to long-term social factors, such as poor socioeconomic conditions and social isolation in the host country, which could increase the frequency of mental disorders over time (13,51).

A recent longitudinal cohort study in Sweden found that the incidence of psychotic disorders in refugees after resettlement was three times higher than in Swedish-born people and 66% higher than in non-refugee migrants (42). However, the study did not identify specific risk factors for refugees to develop psychosis.

## 2.3. Barriers to mental health care

Refugees, asylum seekers and irregular migrants face a number of barriers to accessing health care in general, as identified in previous Health Evidence Network reports (5,6), which are also likely to affect access to and provision of mental health care.

### 2.3.1. Lack of knowledge of legal entitlements and the health care system in the host country

Refugees, asylum seekers and irregular migrants may face difficulties in navigating a health care system that is foreign to them. These migrants may lack the knowledge about their legal entitlements to accessing care (43,52,53). This may lead to the inappropriate use of accident and emergency services: using these services for





health problems that do not constitute emergencies and could be dealt with by other health services (85). Individuals from these groups who have mental disorders may assume that they are not entitled to access specialist mental health services or may find access to these services too difficult (54,55).

Health professionals may also be unaware of what care these migrant groups are entitled to in the host country, which can prevent or delay appropriate referrals for mental health care (56–58).

### 2.3.2. Poor command of the host country language

Many refugees, asylum seekers and irregular migrants have an insufficient command of the language of the host country, particularly soon after their arrival (11,37,43,52,59,60).

In mental health care, more so than in other areas of health care, oral communication between patients and professionals is central to providing a correct diagnosis and treatment (54,55). A lack of clear communication between patients and professionals can hinder the accurate detection of mental health symptoms and, consequently, the diagnostic processes, as well as the appropriate responses of services, including referrals and longer-term care pathways if required (25).

The use of interpreters may not necessarily overcome all communication difficulties: misunderstandings between patients, interpreters and clinicians can still hamper the diagnostic process (61). Indeed, despite a high usage of interpreters (82% of a sample in one study (53)), a mental health diagnosis was not made in more than half of all initial assessments of asylum seekers.

Mental health professionals have reported a number of issues in utilizing interpreters, including lack of access (often because of lack of funding) or a poor quality of interpreting service (18,57). This may cause under- or overestimation of the mental difficulties of the assessed individuals, leading to inappropriate treatment and care. A review of research studies found that assessments made by native speakers indicated lower prevalence rates of all mental disorders compared with assessments conducted through interpreters (13).

Poor language proficiency can also negatively influence the effectiveness of psychological treatments. One study suggested that such treatments are more effective when provided through an interpreter if the patient has a poor command of the language of the host country (62).

### 2.3.3. Cultural beliefs about mental health

Refugees, asylum seekers and irregular migrants are heterogeneous groups with varying cultural beliefs, which can influence the likelihood of seeking treatment and of detecting mental disorders, as well as attitudes to treatment (52).

For example, supernatural explanations for mental disorders may be found in some migrant groups (61). Other groups tend to regard, and therefore present, their symptoms as physical rather than mental health problems (63). In addition, there may be a general lack of knowledge about mental disorders in these communities, which may be particularly apparent in some families and peer groups (11,56). Negative views about mental health can lead to many refugees, asylum seekers and irregular migrants being reluctant to step outside of the beliefs of their peers and families to seek treatment (86).

### 2.3.4. Cultural expectations towards health care professionals

Cultural expectations influence how mental health care professionals are regarded, for example in relation to their status and ability to provide help. Such expectations may also lead to discrepancies between the views of patients and those of professionals regarding the benefits, or lack thereof, of different types of treatment.

Some patients from these migrant groups may have high expectations of clinicians because of their perceived superior standing in society. For example, some asylum seekers may be hopeful that clinicians can improve their difficult living conditions by moving them from unfavourable conditions in detention centres, updating them on the progress of their asylum applications or helping with these applications (53).

Discrepancies can also arise between the expectations of these groups and those of the mental health professionals in terms of treatment pathways. For example, tensions may occur if patients believe they are seriously mentally or physically ill, yet the clinician provides no pharmacological intervention or provides only a psychotherapeutic intervention (64).

### 2.3.5. Lack of trust towards services and authorities in the host country

Refugees, asylum seekers and irregular migrants may have an inherent lack of trust in public organizations based on premigration experiences of persecution and/or a fear of being reported to authorities. Such premigratory experiences may make it difficult for these groups to trust a foreign health care system and share sensitive information about mental health difficulties (11,44).



Owing to their problematic legal status, irregular migrants may also find it difficult to engage with and trust services. They often fear that clinicians may report them to the authorities if they access services, even in countries where this is not a legal requirement and may be regarded as breaching confidentiality (57,59). Such concerns may have a particular impact on their willingness to engage with psychological therapies (64).

Difficulties in developing trust go beyond the relationship between a patient and a clinician; they can also affect the relationship with interpreters. In particular, interpreters from the same background and culture may be viewed with suspicion (61). Many patients report negative experiences with interpreter-led consultations, including feelings of reduced anonymity and confidentiality. This can cause patients to avoid disclosing personal information and thoughts, particularly those regarding mental health, to and through the interpreter (65).

## 2.4. Good practice for mental health care provision

While the challenges and barriers discussed above are ubiquitous, local, regional and national initiatives have led to variations in practice. Some components of good practice can be identified. First and foremost, social integration seems a key strategy to reduce the incidence of mental disorders and improve both short- and long-term outcomes. Other components of good practice are more specifically related to what health care services can do. Two studies conducted in 14 and 16 European countries, respectively, suggested that similar principles of good practice are common across European countries (54,55), despite countries differing in the organization of health care, the arrangements and level of funding for services and their history of immigration. The main principles are discussed in the following sections.

### 2.4.1. Promoting social integration

As identified through the reports of experienced practitioners, existing good practice focuses on facilitating social integration. This may require collaboration between the mental health care, social care and voluntary sectors (87–89). Social integration and good community relationships may be promoted by initiatives in education, housing and employment (88–91).

Strategies focusing on education include providing support for learning the language of the host country, acknowledging qualifications obtained in the countries of origin and developing school policies that encourage the integration of migrant students

with those of the host country. Some initiatives provide cultural competency training to teachers and address structural and individual discrimination within schools.

In terms of housing, programmes have aimed to strengthen integration into the local neighbourhood by developing and fostering connections with people from the same ethnic groups, through forming links with wardens or advocates and, in some cases, establishing community forums for helping individuals to expand their social networks.

Potential strategies to facilitate employment encompass schemes to identify gaps in skills and qualifications and then to help in the acquisition of those skills and the required qualifications. This may be particularly important for vulnerable groups such as young adults (88–91).


#### 2.4.2. Providing outreach services

Outreach services may engage with refugees, asylum seekers and irregular migrants by providing information and support, in addition to identifying people with mental disorders within the groups and helping them to access services. These outreach services make themselves easily available, are often familiar with the specific background of the group they support and are often trusted more than mainstream health care services. They can facilitate access to the appropriate service and help patients to engage with clinicians (66). The most beneficial outreach services are those with good links to mainstream mental health services (and other health services) and those that can promptly refer patients to such services (64).

Given the frequent mistrust shown by irregular migrants towards public organizations in the host country, NGOs can be well placed to fulfil the outreach role with these migrants, educating them about the available health care opportunities and providing some support (43,57,58,67).

#### 2.4.3. Ensuring coordination of services

Services in mental health care systems tend to be fragmented, which can make it difficult to access the correct service, leading to inefficient service provision. This applies to the general population in many host countries, and even more so to refugees, asylum seekers and irregular migrants (54,55). Good coordination between specialized outreach services (which are often voluntary or non-statutory) and mental health services is important and helpful (18,54,55,64). It is also important to direct those individuals inappropriately accessing care through accident and emergency services to the correct care pathways (54,55).



Once patients have reached mainstream health services, simple referral processes and administrative procedures can help in treating patients with complex health needs (52,54). Some programmes have combined psychological and physical treatments into a single collaborative service with the aim of enhancing the acceptability of mental health care and reducing the reservations of some refugee populations about mental health treatment (64).

The need for multidisciplinary teams in such services is especially important in detention centres (68). Having mental health professionals working alongside primary care clinicians within these centres could facilitate the prompt detection of mental disorders, prevent further deterioration and adverse events, and enable appropriate treatment provision (69).

#### 2.4.4. Providing information about health care entitlements

The provision of sufficient information about health care entitlements and available services to refugees, asylum seekers, irregular migrants, and to health professionals, enables services to be accessed and utilized more appropriately. People from these migrant groups require information on how to access services and the type of support that can be obtained.

Frequently, professionals are also unaware of the entitlements of these groups or of the services and support that are available locally; they should, therefore, receive such information as part of their professional development programmes (61,64).

There are a number of ways to provide information about health care entitlements and services to people from these migrant groups (37,64). Websites have been created to disseminate information on programmes specifically catering for the needs of refugee and other migrant populations (e.g. <http://www.healthgate4all.gr/>) (11). However, written communication is not always appropriate: some refugees, asylum seekers and irregular migrants are not fully literate or are more used to oral communication. In these cases, information can be provided via spoken communication or videos (70,92). A more traditional classroom-based approach may also be favoured by some refugee groups. This encourages discussion among peers about common issues in navigating the mental health care system, as reported in Case study 1.

##### Case study 1. Providing information on services

Ekblad et al. outlined a public health project in which information on mental health and care services was provided to asylum seekers in a meeting facilitated by the Swedish Migration Board (71).

#### Case study 1 (contd)

Health information was provided to the participants by a registered nurse. To begin with, the nurse presented information about the health care system in Sweden, including entitlements to health care, costs of services, how to contact health care facilities and details of a number of NGOs. The second part of the session focused on health promotion, including the potential effects of migration on well-being and the difficulties of postmigration life.


Following the meeting, participants completed a questionnaire containing three closed questions and options for additional open comments about the session. The central theme resulting from a content analysis of these comments was the participants' appreciation of receiving information and being acknowledged with respect and empathy. Other expressed themes included the profound need for such information sessions in the communities of asylum seekers, and the importance of open discussion with peers.

### 2.4.5. Using interpreting services and new technologies to overcome language barriers

Effective methods for overcoming language barriers can improve access to and the experience of mental health care for refugees (32). While this is not always a straightforward task, given the heterogeneity of this group, a number of measures have been employed to overcome language barriers. These include forming partnerships with local interpreting agencies, using validated assessment tools in different languages, employing staff with a range of linguistic capabilities and favouring contacts with native speaker clinicians through so-called transcultural telepsychiatry. This is used to provide mental health care that is culturally appropriate and is administered to patients through the use of videoconferencing with a clinician who speaks the same language, thus avoiding travel costs for the patient and the professional. An example is outlined in Case study 2.

#### Case study 2. A transcultural telepsychiatry service

In 2010, Mucic described the implementation of a transcultural telepsychiatry service that was used to enhance the access of refugee groups to more culturally



### Case study 2 (contd)

appropriate health care professionals in terms of their bilingual proficiency and cultural competence (65).

The free service was offered to 45 refugees and 12 asylum seekers, with a total of nine languages being spoken over the 34 months of the project. Each patient had an average of 5.2 telepsychiatry sessions. Clinicians not only spoke the same language as their patient but also had a comprehensive knowledge of the health care system in both the host country and the patient's original country.

A questionnaire was administered to patients in the final session. The questions explored their attitudes towards aspects of telepsychiatry, including technology, confidentiality, preference and information. Two open-ended questions investigated participants' views on the benefits and disadvantages of this type of service.

Patients reported a high level of satisfaction with the service, stating they would be happy to use telepsychiatry again and to recommend it to their peers. Patients preferred telepsychiatry sessions with a clinician who spoke their native language compared with normal interpreter-assisted consultations as the latter also diminished their concerns regarding confidentiality.

In the absence of native speaker clinicians, high-quality interpretation services may be crucial for accessing the thoughts, beliefs and experiences of patients from migrant groups. Ensuring relevant training for interpreters and training clinicians to work with interpreters fosters a better patient experience (62,72). Using skilled interpreters can also maximize the outcomes of psychological interventions. For example, providing cognitive behaviour therapy with an interpreter is feasible and can improve health outcomes for refugees (62). Telephone interpretation services are available as a less expensive alternative to face-to-face interpretation (43).

Furthermore, administering assessment questionnaires validated in the relevant language can improve the accuracy of detecting mental disorders (53).

## 2.4.6. Training professionals to work with these migrant groups

Attitudes towards refugees, asylum seekers and irregular migrants, and levels of awareness of the barriers they face in accessing and receiving mental health care, vary among professionals (54,55). In addition, different cultural beliefs and expectations may make it difficult for professionals to treat mental illness in members of these migrant groups. Therefore, many experts advocate training mental health professionals in cultural awareness so that they are competent and confident in managing a diverse range of patients, reaching an accurate diagnosis and engaging the patients in effective treatment (43,61,73–75).

Training and supervision can increase the awareness of mental health professionals regarding the different beliefs and expectations of migrant populations, thus allowing these beliefs and expectations to be considered in treatment planning (22). For example, professionals can be made aware that some patients may have physical or supernatural explanations for their mental disorder, while others may be reluctant to disclose personal details for fear of discrimination or through lack of trust based on previous difficult relations with authorities and organizations. Professionals can also benefit from training on how to work with interpreters during clinical consultations, which improves their confidence in treating refugees, asylum seekers and irregular migrants (62).

## 2.5. Policies relevant to access to mental health care for refugees, asylum seekers and irregular migrants

### 2.5.1. European level

The EU Charter of Fundamental Rights outlines the notion of the universal right to access health care, stating: “Everyone has the right of access to preventive health care and the right to benefit from medical treatment under the conditions established by national laws and practices. A high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities” (93).

These principles are also expressed in policies developed by the EU Agency for Fundamental Rights and the Platform for International Cooperation on Undocumented Migrants (94,95). It is argued that failure to offer access to health care other than emergency services to these groups (in particular to irregular





migrants) can exacerbate individual health risks as well as placing greater economic strain on health care resources (94,95).

The European Parliament has formulated a number of resolutions relating to access to health care for vulnerable populations, such as irregular migrants. These resolutions called for ensuring equal access to health care systems, promoting “language mediation services” and training programmes for professionals, dissociating health policies from immigration control and no longer permitting health care professionals to report irregular migrants who have come into their care (96–98).

However, there are inconsistencies in translating these recommendations to the national level, where a number of legalities can complicate or even hinder the access of refugees, asylum seekers and irregular migrants to mental health care.

### 2.5.2. National level

At a national level, different factors may act as barriers to full health care access for refugees, asylum seekers and irregular migrants (10). In some countries, economic programmes and reduced funding for health care may have influenced more limited entitlements and reduced access. Legal sanctions and less formal guidelines may dissuade staff from engaging with irregular migrants. Yet, there is evidence that many professionals feel an ethical obligation to provide mental health care and often find ways of doing so (54,55).

A number of factors at a national level may improve mental health care access for these groups. For example, centrally funded national health systems and countries with more economic resources tend to have more inclusive health care policies. However, only 18 European countries currently fund and promote health education and staff training on cultural awareness (10).

### 2.5.3. Alternatives to detention

Asylum seekers and irregular migrants may be held in detention centres. As described in section 2.1, being detained is regarded as a postmigration risk factor for mental disorders.

In some countries, such as France, Italy, Luxembourg, the Netherlands and Switzerland, alternatives to detention centres are available. These include:

- provision of a bail bond or surety;
- requirements to report to immigration authorities;

- open centres, semi-open centres, directed residence, dispersal and restrictions to a district;
- registration and documentation;
- released to nongovernmental supervision; and
- electronic monitoring and home curfew.

The only data available on outcomes of alternatives to detention compared with detention centres have been collected as part of a UNHCR report (76). Alternatives are less expensive than detention centres, although they carry a higher risk of absconding. The risk of absconding is lower in countries where refugees have chosen to reside than in so-called transit countries.

Alternatives to detention are likely to be more considerate of the freedom, mental health and human rights of individuals. There are no data on whether alternatives to detention have any effect on mental health outcomes.

## 2.6. Outcomes considered

No routine systems were found for documenting the mental health care services used by refugees, asylum seekers and irregular migrants in a given region or nation. These systems would be required to assess the short- and long-term outcomes of care.

Good practice for the care of refugees, asylum seekers and irregular migrants has been identified and evaluated using mainly qualitative research methods and reports based on practitioners' experience and views (54,55,64,77,88–91). Only a few quantitative assessments of patients and professionals have been carried out (64); most relate to studies assessing the experiences of cultural competence training programmes for mental health professionals (56,64).

No studies into the effectiveness of good practice compared with other interventions or standard care were found. Consequently, the existing data do not yet provide high-quality evidence on the clinical effectiveness and cost-effectiveness of service models in implementing components of good practice.



## 3. DISCUSSION

### 3.1. Strengths and limitations of the review

This report adopted a comprehensive approach with a systematic review of scientific papers and grey literature. Despite a rigorous search for all papers published in English and Russian and referring to studies in the WHO European Region, only three relevant papers in Russian were identified.

Owing to the limitations of the available evidence, the results of this report should be interpreted with caution. Studies assessing the rates of mental disorders in groups of refugees, asylum seekers and irregular migrants used inconsistent methodologies for assessing both mental disorders and risk factors in these groups. Very few studies used representative samples and many sample sizes were rather small. Consequently, the extent to which the variability of results reflects true differences among the studied groups and whether such variability is influenced by methodological differences are not known.

Other limitations pertain to studies on good practice for care provision to these groups.

- There are a limited number of studies in Europe; most of these were carried out in western European countries, and none used clinical or social outcome measures for evaluating defined care practices.
- The evidence on mental health care provision was dominated by two large Europe-wide qualitative studies (54,55).
- The same barriers affecting access to care are also likely to affect access to research; consequently, there is more information on those who use health care services than on those who do not but might be in need of it.
- The implications for mental health care of the increased migration flows in the last year (2015–2016) could not be identified.
- There are more studies on refugees than on the other two groups and, in particular, few studies consider irregular migrants; however, the reported principles of good practice address barriers to care and risk factors for poor mental health that are common to the three migrant groups and are likely to be valid for all three groups.

Finally, research studies require time to be completed and published, while the sociopolitical context can change rapidly. It could be argued that the likelihood of individuals from these groups developing mental health problems may be affected by

societal and political changes within the host countries as well as by new and more restrictive migration policies (e.g. closed borders, forced repatriation). This could be a focus for new studies on groups in this migration wave.

## 3.2. Policy options and implications

Mental health care systems should be able to respond promptly to the mental health needs of refugees, asylum seekers and irregular migrants who experience mental disorders and to facilitate their access to care. Although the prevalence rates of most mental disorders do not seem substantially higher than those in host country populations, the high numbers of refugees, asylum seekers and irregular migrants currently coming to European countries pose a significant challenge to mental health care systems. Moreover, individuals or groups exposed to risk factors may be more likely to present with mental disorders. For example, studies focusing on conflict-affected populations – including both refugees and individuals who stayed in their original countries – have shown higher rates of PTSD and depression compared with general populations (99,100). A cohort study in Sweden found a higher incidence of psychotic disorders in refugees after resettlement compared with non-refugee migrants and the host population (42). There could, therefore, be substantial pressure on mental health services, with up to tens of thousands of additional patients per year in some countries.

Moreover, the barriers often experienced by these groups might cause them to access care through inappropriate pathways, for example using expensive accident and emergency services instead of general practice or mental health services (14).

Evidence suggests that facilitating social integration can improve the outcomes of existing disorders and prevent the onset of new mental disorders, especially depression (13,82). Much good practice in mental health services in Europe has been described in the literature, and it is reasonable to assume that numerous other exemplary services are currently unreported. It should be possible to learn from such good practice. Implementation of the components of good practice identified in this report should consider contextual and local factors, but, overall, these common components can provide general guidance on how to facilitate access to and provision of appropriate care.

### 3.2.1. Policy options for social integration

Health professionals, social care and community groups need to collaborate to enhance social integration and reduce marginalization and isolation (61). Community



programmes and initiatives can foster integration in different ways. For example, they can help refugees to establish contacts within host communities (78), improve their command of the host country's language, develop qualifications or skills, or receive formal acknowledgement of the qualifications obtained in their country of origin (13). Programmes that support refugees with transitioning into paid or voluntary employment are required and may be economically beneficial to both the refugees and society at large (35).

More specifically for asylum seekers and irregular migrants, alternatives to detention can provide more freedom, consistent with humanistic and ethical principles. Although the possible benefits to mental health can be speculated, current evidence does not allow definite conclusions to be drawn. For a number of ethical, legal and practical reasons, sound research evidence on this topic will be difficult to generate. Yet, it might be possible to conduct cohort comparison studies (with people in detention centres) in places where alternatives to detention have been established.


### 3.2.2. Policy options for adapting health care provision

A number of policy options can be proposed based on the analysis reported here.

- **Mapping outreach services** will provide information on what outreach services exist and where they are required will enable such services to be encouraged and linked to mainstream services if such links are not already in place (64). Since the numbers and distribution of refugees and asylum seekers can change rapidly, outreach programmes in some areas may need to be established quickly and funding provided efficiently. Outreach services can facilitate access by refugees, asylum seekers and irregular migrants to mental health care (66). Specialized outreach services should be familiar with the cultural background of individuals in the group they intend to reach, be competent in communicating with them, have regular contact with them and show a reliable presence in the given locality (66). The use of cultural mediators may help to identify mental and physical health disorders in migrants (101).
- **Strong links between services and uncomplicated administrative procedures for referrals** can minimize fragmentation of services, which is a well known problem for those accessing mental health care (54). This can be even more difficult for people who have migrated to a new country. Consequently, health policies should foster links between mental health, physical health and social services, simplify procedures for referrals within health services, and establish or strengthen links between health services and outreach services. Such coordination of services requires appropriate organization, funding arrangements and policies

to ensure that the tasks, capacities and roles of different services within a system are complementary.

- **Providing information on health care entitlements and available services** is essential both for refugees, asylum seekers and irregular migrants and for the professionals concerned (61,64). Refugees, asylum seekers and irregular migrants may also require explanations about the mental health care system, the range of available services and the options for first contacts. Such information should be provided in a manner that considers the language, culture and specific problems of the target population. Printed, audio and video material, oral communication, websites and social media may be used (11). The extent to which the provided information is used and understood by the different groups should be assessed and monitored.
- **Training to help professionals working with these groups** is available in 18 countries in the WHO European Region and training programmes to promote cultural awareness in mental health professionals form part of national policies (10). Policies should stipulate that such programmes, and participating health professionals, understand the background and expectations of the different groups of refugees, asylum seekers and irregular migrants, as well as the common barriers to accessing and engaging with health care services. Given the high rates of PTSD in refugees and asylum seekers, these programmes should involve both specialized mental health services and providers of mental health interventions in general practice, where PTSD is often treated (43,61,73,74). Incorporating cultural awareness and transcultural mental health care training into the university curricula of medical doctors and allied mental health professionals has also been suggested (102).
- **Language barriers** may hamper access to care for individuals and the detection and treatment of mental disorders (25). All services providing mental health care should establish links with interpreting services that supply high standards of interpretation for different languages and train their staff in using them (62,72). Establishing mechanisms for accreditation of these services may also be important in order to achieve a consistent quality of services.
- **Alternative communication systems can be instituted.** Use of the telephone for interpretation services may be a cost-effective alternative where there are insufficient resources to support face-to-face interpreting services (43). Online simultaneous translation systems could be adopted by services for translating information on services or standardized assessment tools. Furthermore, telepsychiatry has the potential to effectively match patients with clinicians who



speak the same language through videoconferencing, thus eliminating travel costs for mental health professionals and patients. While this cannot replace all mental health care provided via face-to-face contact, it may become a useful additional option (65).

### 3.3. Resources for implementing policy options

In general, implementing good practice to overcome barriers to mental health care for refugees, asylum seekers and irregular migrants requires sufficient resources and organizational flexibility within services.

Sufficient resources are required to support programmes for social integration, good interpreting services or technology tools to reduce language barriers, tailored information packages for different groups or online tools for simultaneous translation, and training of professionals. Additional funding may also support specific clinical interventions. For example, studies in Europe suggest that narrative exposure therapy (103–105) and trauma-focused therapy (106,107) are effective for refugees and asylum seekers with PTSD.

Organizational coordination and flexibility does not always depend on the provision of more resource funding: it may be promoted by national and local policies and operational protocols to foster links between different services. Arrangements between services for mental and physical health and social services may help to simplify referrals, facilitate appropriate pathways and improve responses to people who present with complex health and social problems.

Both upfront funding for sufficient resources and efforts to improve the coordination and flexibility of services might reduce the use of inappropriate care pathways (e.g. costly accident and emergency services instead of general practice and mental health services) and the long-term societal burden related to mental disorders in these groups. Initiatives to improve the mental health of refugees, asylum seekers and irregular migrants may have significant societal and economic benefits (94,95).

### 3.4. Challenges for future research and documentation

The currently available evidence on mental health care for refugees, asylum seekers and irregular migrants is mainly based on the qualitative exploration of patients' and professionals' experiences or on reports from experienced practitioners.

Although the number of high-quality quantitative studies in this area is limited, this review has identified components of good practice that are applicable to all European countries. Yet, there is a need for large-scale quantitative studies and – where feasible – experimental studies to validate the effectiveness and cost-effectiveness of current practices to address mental disorders in these populations.

A central task for research should be the comprehensive analysis of long-term pathways to obtain precise information on what services the different groups use over time, identify inappropriate under- and overuse of care, and link these pathways to clinical and social outcomes. Outcome measures may include assessments of general health status that consider both physical and mental health, social integration and quality of life. Ideally, data on service use over time and core outcome measures should be available in routine documentation systems and regularly monitored to inform policies.






## 4. CONCLUSIONS

The overall rates of mental disorders in refugees, asylum seekers and irregular migrants appear similar to those in the host populations. The exception is PTSD, which is clearly more common in these migrant groups. However, the high absolute numbers of people from these groups can still constitute a significant challenge to health care systems. Some individuals or groups of refugees, asylum seekers and irregular migrants are exposed to a number of risk factors for mental disorders. The rates of depression and anxiety disorders tend to increase over time, and poor mental health is associated with deprived socioeconomic conditions, in particular social isolation and unemployment. One cohort study also found an increased incidence of psychotic disorders in refugees after resettlement.


Challenges for the Member States of the WHO European Region are to facilitate the social integration of refugees, asylum seekers and irregular migrants within the host countries, and to adopt good practices that improve access to and outcomes of mental health care. Strategies for implementing policies to achieve this include providing resources for social integration programmes, outreach services, appropriate information and staff training; promoting organizational flexibility to provide the best possible coordination between services; routine data collection on service use and outcomes of this use; and the formal evaluation of implemented initiatives.

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# ANNEX 1. SEARCH STRATEGY

## Databases

The searches were performed on 22 February 2016 and updated on 16 May 2016. The databases of ASSIA, CABI Global Health, Cochrane Library, Excerpta Medica, PubMed and the Social Sciences Citation Index were searched for relevant scholarly literature. Grey literature was sourced using Google, Google Scholar and OpenGrey. Websites of the following organizations were examined to find grey literature and current statistics: EU Statistical Office (Eurostat), Health for Undocumented Migrants and Asylum Seekers Network, Migrant Integration Policy Index, Platform for International Cooperation on Undocumented Migrants, UNHCR and WHO.

Screening was undertaken by two researchers and involved identifying studies that contained information on the mental health status of refugees, asylum seekers and/or irregular migrants; the risk factors for mental disorders in these groups; the delivery of mental health care to these groups; the measures used to assess mental health care delivery to these groups; and/or of policies referring to access and provision of mental health care for these groups. Any uncertainties or disagreements regarding studies were resolved via discussion with a third reviewer.

## Search terms

The search strategy examined the terms “refugees”, “asylum seekers”, “irregular migrants”, “European Region”, “interventions” and “mental health”. Search functions within the different datasets were used to specify that the search should also identify publications in Russian.

### Target population

The search for target population was expanded to include an alternative term for “irregular migrants” used in studies: “undocumented migrants”.

### Intervention

To ensure that the search strategy was comprehensively incorporating aspects of interventions and care used in health care systems, the following MeSH terms were used in PubMed and Cochrane Library databases: “primary care”, “secondary care” and “tertiary care”. In addition, the search was expanded to incorporate the following free text terms: “service”, “delivery”, “provision”, “model”, “programme”, “treat”, “therapy”, “psychotherapy”, “access”, “semi-open institutional based reception”, “good practice”, “community”, “community based psychiatry”, “community based mental health care”, “specialized services” and “specialized programmes”.

## Mental health

To cover all aspects of mental health issues, the following MeSH terms were used in PubMed and Cochrane Library databases: “post-traumatic stress disorder”, “mood disorder”, “anxiety disorder”, “personality disorder” and “bipolar disorder”. In addition, the search was expanded to incorporate the following free text terms: “mental”, “psychology”, “psychiatry”, “depression”, “trauma”, “schizo”, “suicide”, “psycho” and “affective disorder”.


## Country search strategy

Search terms incorporated the official and informal names of the 53 countries of the WHO European Region, as well as derivatives of these names: 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, [the former Yugoslav Republic of] Macedonia, Malta, Marino, the Republic of Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, United Kingdom, Uzbekistan.

**The search of the academic literature was conducted in the title/abstract field with the following keywords and MeSH terms across the databases.**

**ASSIA:** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” OR psycho\* OR “mood disorder” OR “anxiety disorder” OR “personality disorder” OR “affective disorder” OR “bipolar disorder”) AND (care OR “primary care” OR “secondary care” OR “tertiary care” OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\* OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

**CABI Global Health:** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” OR psycho\* OR “mood disorder” OR “anxiety disorder” OR “personality disorder” OR “affective disorder” OR bipolar disorder) AND (care OR “primary care” OR “secondary care” OR “tertiary care” OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\*)



OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

**Cochrane Library:** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” [MeSH] OR psycho\* OR “mood disorder” [MeSH] OR “anxiety disorder” [MeSH] OR “personality disorder” [MeSH] OR “affective disorder” OR “bipolar disorder” [MeSH]) AND (care OR “primary care” [MeSH] OR “secondary care” [MeSH] OR “tertiary care” [MeSH] OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\* OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

**Excerpta Medica:** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” OR psycho\* OR “mood disorder” OR “anxiety disorder” OR “personality disorder” OR “affective disorder” OR bipolar disorder) AND (care OR “primary care” OR “secondary care” OR “tertiary care” OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\* OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

**Google Scholar:** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” OR psycho\* OR “mood disorder” OR “anxiety disorder” OR “personality disorder” OR “affective disorder” OR bipolar disorder) AND (care OR “primary care” OR “secondary care” OR “tertiary care” OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\* OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

**OpenGrey:** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” OR psycho\* OR “mood disorder” OR “anxiety disorder” OR “personality disorder” OR “affective disorder” OR bipolar disorder) AND (care OR “primary care” OR

“secondary care” OR “tertiary care” OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\* OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

**PubMed:** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” [MeSH] OR psycho\* OR “mood disorder” [MeSH] OR “anxiety disorder” [MeSH] OR “personality disorder” [MeSH] OR “affective disorder” OR “bipolar disorder” [MeSH]) AND (care OR “primary care” [MeSH] OR “secondary care” [MeSH] OR “tertiary care” [MeSH] OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\* OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

**Social Sciences Citation Index (from Web of Science Core Collection):** (irregular migra\* OR undocumented migra\* OR refugee\* OR asylum seeker\* OR post-migra\* OR deport\*) AND (mental\* OR psycholog\* OR psychiatr\* OR depress\* OR trauma\* OR schizo\* OR suicid\* OR “post-traumatic stress disorder” OR psycho\* OR “mood disorder” OR “anxiety disorder” OR “personality disorder” OR “affective disorder” OR bipolar disorder) AND (care OR “primary care” OR “secondary care” OR “tertiary care” OR service\* OR delivery OR provision OR consult\* OR model OR program\* OR treat\* OR therap\* OR psychotherap\* OR access\* OR “semi-open institutional based reception” OR “good practice” OR community\* OR “community based psychiatry” OR “community based mental health care” OR “specialized services” OR “specialized programmes”) AND (country search strategy)

#### Number of results for databases

ASSIA: 890

CABI Global Health: 425

Cochrane Library: 18

Excerpta Medica: 315

Google Scholar: 2590

OpenGrey: 55

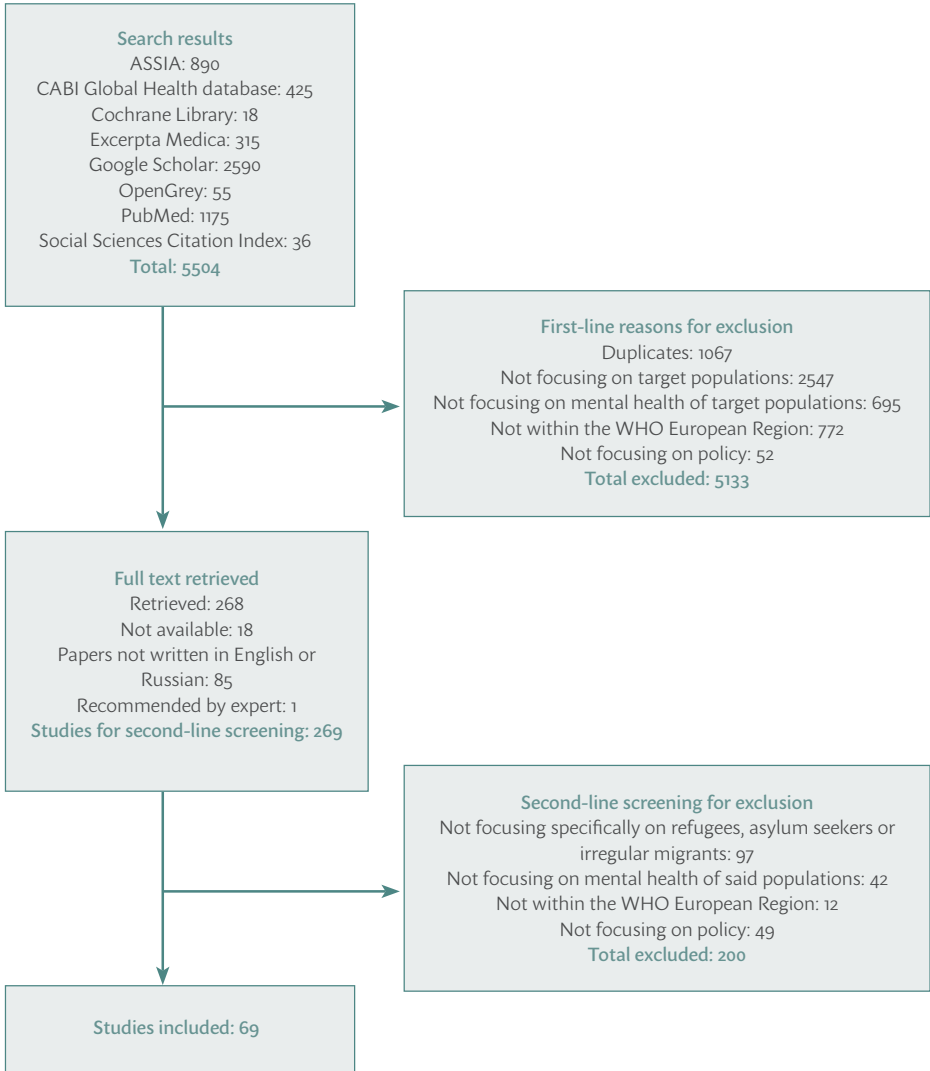
PubMed: 1175

Social Sciences Citation Index: 36

A PRISMA flow diagram of included and excluded studies is given in Fig. A1.



Fig. A1 Prisma flow chart



## ANNEX 2. STUDIES INCLUDED IN THE EVIDENCE SYNTHESIS

Table A1. Summary of studies included in the evidence synthesis

Study	Country	Design
Bradby et al., 2015 (5)	WHO European Region	Systematic review
De Vito et al., 2015 (6)	WHO European Region	Systematic review
Hebebrand et al., 2016 (11)	NA	NA: first assessment
Bogic et al., 2015 (13)	NA	Systematic review
Fazel et al., 2005 (14)	Australia, Canada, Italy, New Zealand, Norway, United Kingdom, USA	Systematic review
Papadopoulos, 2006 (15)	NA	NA: article
Iversen & Morken, 2003 (16)	Norway	Retrospective cohort study
Lindert et al., 2009 (17)	NA	Systematic review
McColl & Johnson, 2006 (18)	United Kingdom	Cross-sectional descriptive investigation
Opaas & Varvin, 2015 (19)	NA	Qualitative interviews
Lie, 2002 (20)	Norway	Longitudinal study
Lindencrona et al., 2008 (21)	Sweden	Cross-sectional
McColl et al., 2008 (22)	NA	NA: article

Population	Health condition studied	Focus of the study
Refugees	NA	Barriers, good practice models
Irregular migrants	NA	Barriers, good practice models
Young refugees	Neurotic disorders	Good practice models
16 010 conflict-affected refugees	Depression, unspecified anxiety disorder, PTSD	Prevalence
6743 adult refugees	Psychotic illness, major depression, generalized anxiety disorder, PTSD	Prevalence
Refugees	NA	Risk factors
94 immigrants, 39 asylum seekers, control group of 133 Norwegians	Schizophrenia, reaction to severe stress, adjustment disorders	Prevalence
Refugees	Depression, anxiety	Prevalence
104 refugees and asylum seekers	Bipolar affective disorder, depression, PTSD, schizophrenia, other psychosis	Prevalence
54 adult refugee patients	PTSD	Risk factors
240 refugees	PTSD	Prevalence
124 Middle Eastern refugees	Symptoms of post-traumatic stress, symptoms of common mental disorder	Risk factors
Refugees and asylum seekers	Anxiety, depression, PTSD	Good practice models, risk factors

Table A1 (contd)

Study	Country	Design
Priebe et al., 2012 (23)	5 Balkan countries (Bosnia-Herzegovina, Croatia, Kosovo (province of Serbia at the time), Republic of Macedonia, Republic of Serbia), 3 western Europe countries (Germany, Italy, United Kingdom)	Multicentre epidemiological survey
Morgan, 2008 (24)	United Kingdom	Cross-sectional study
Bell & Zech, 2009 (25)	European Union – Belgium as a case point	NA: expert opinion
Mohamud, 2010 (26)	United Kingdom	Questionnaire
Drozdek et al., 2003 (27)	The Netherlands	Cross-sectional study
Firenze et al., 2016 (28)	Italy	Cross-sectional study
Teodorescu et al., 2012 (29)	Norway	Cross-sectional study
Heeren et al., 2014 (30)	Switzerland	Questionnaire study
Iversen & Morken, 2004 (31)	Norway	Retrospective analysis
Johansson Blight et al., 2009 (32)	NA	Literature review
Pfortmueller et al., 2016 (33)	Switzerland	Retrospective data analysis
Cohen, 2008 (34)	United Kingdom	Pilot study

Population	Health condition studied	Focus of the study
3313 interviewees in the Balkans, 854 refugees in western Europe	Anxiety, depression, psychoticism, symptoms of post-traumatic stress	Risk factors
98 refugees and asylum seekers	Anxiety, depression, PTSD	Risk factors
Asylum seekers	NA	Barriers
143 Somali refugees and asylum seekers	Agoraphobia, major depression, PTSD	Prevalence, risk factors
74 adult male asylum seekers	Anxiety, depression, dissociation, PTSD	Prevalence
581 asylum seekers	Major depression, PTSD	Prevalence
61 refugee outpatients	Agoraphobia, generalized anxiety disorder, major depression, panic disorder, PTSD	Prevalence, risk factors
65 asylum seekers, 34 refugees holding permanent protection visas, 21 irregular migrants, 26 labour migrants, 56 residents	Anxiety, depression, PTSD	Prevalence, risk factors
53 asylum seekers, 45 refugees	PTSD, schizophrenia	Prevalence
Refugees	NA	Good practice models
880 asylum seekers	Depression, PTSD, psychiatric comorbidity	Prevalence
Asylum seekers who had self-harmed in immigration detention centres	Self-harm	Prevalence, risk factors

Table A1 (contd)

Study	Country	Design
Procter et al., 2015 (35)	NA	Literature review
Hollander, 2013 (36)	Sweden	Epidemiological studies of register data
Toar et al., 2009 (37)	Ireland	Cross-sectional study
Gerritsen et al., 2006 (38)	The Netherlands	Cross-sectional population-based study
Crumlish & O'Rourke, 2010 (39)	NA	Systematic review
Ryan et al., 2008 (40)	Ireland	Cohort study
Montgomery & Foldspang, 2008 (41)	Denmark	Cohort study
Hollander et al., 2016 (42)	Sweden	Cohort study
Dorn et al., 2011 (43)	The Netherlands	Cross-sectional study
Teunissen et al., 2014 (44)	The Netherlands	Qualitative
Teunissen et al., 2014 (45)	The Netherlands	Survey
Atwoli et al., 2015 (46)	NA	Literature review
Alpak et al., 2014 (47)	Turkey	Cross-sectional study
Buhmann, 2014 (48)	NA	Literature review
Bogic et al., 2012 (49)	Germany, Italy, United Kingdom	Multicentre survey

Population	Health condition studied	Focus of the study
Refugees and asylum seekers	Self-harm	Risk factors
Study 1, 56.5% refugees (of 43 168); study 2 (part 1), 1.6% refugees (of 5 507 262); study 2 (part 2), 15.4% refugees (of 298 641); study 3, 24.2% refugees (of 86 395)	NA	Risk factors
60 adult asylum seekers, 28 adult refugees	Anxiety, depression, PTSD	Prevalence
178 refugees, 232 asylum seekers	Anxiety, depression, PTSD	Prevalence
Refugees and asylum seekers	PTSD	Good practice models
162 asylum seekers	Psychological distress	Prevalence, risk factors
131 young Middle Eastern refugees	Internalizing behaviour	Risk factors
24 123 refugees, 132 663 non-refugee migrants, 1 191 004 Swedish-born people	Psychotic disorders	Incidence rates
122 irregular migrants	NA	Barriers
15 irregular migrants	NA	Barriers
325 irregular migrants, 216 regular migrants	Addiction, anxiety, depression, psychotic disorder, PTSD	Prevalence
NA	PTSD	Prevalence
352 refugees	PTSD	Prevalence
Traumatized refugees	NA	Good practice models
854 conflict refugees	Anxiety, mood, and substance use disorders, PTSD	Prevalence, risk factors

Table A1 (contd)

Study	Country	Design
Johnson, 1996 (50)	NA	Literature review
Mollica et al., 2001 (51)	Croatia	Follow-up study
Brendler-Lindqvist et al., 2014 (52)	Sweden	Cross-sectional register study
Reko et al., 2015 (53)	Denmark	Descriptive study (using retrospective data)
Priebe et al., 2012 (54)	8 European capital cities (Amsterdam, Berlin, Brussels, Dublin, London, Paris, Vienna, Warsaw)	Descriptive study
Priebe et al., 2011 (55)	16 European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Lithuania, Netherlands, Poland, Portugal, Spain, Sweden, United Kingdom)	Qualitative interviews
Bäärnhielm et al., 2014 (56)	Sweden	Naturalistic mixed methods approach
Dauvrin et al., 2012 (57)	16 European countries (Austria, Belgium, Denmark, Finland, France, Italy, Lithuania, Germany, Greece, Hungary, the Netherlands, Poland, Portugal, Spain, Sweden, United Kingdom)	Qualitative: semi-structured interviews
Woodward et al., 2013 (58)	NA	Scoping review
Poduval et al., 2015 (59)	United Kingdom	Qualitative – inductive thematic analysis
Teunissen et al., 2016 (60)	Greece	Qualitative semi-structured interviews



Population	Health condition studied	Focus of the study
Immigrants, refugees, homeless individuals	Alcohol and drug use	Prevalence, risk factors
534 refugees	Depression, PTSD	Prevalence
43 403 refugees and their families	NA	Barriers
23 asylum seekers	Depression, PTSD, schizophrenia, suicidal ideation	Prevalence
Marginalized groups including refugees, asylum seekers, irregular migrants	NA	Barriers
Health care professionals working in areas with a high proportion of migrants	NA	Good practice models
278 professionals	NA	Good practice models
240 health professionals	NA	Barriers
Irregular migrants	NA	Barriers
16 irregular migrants, 4 volunteer staff	NA	Barriers
12 general practitioners with clinical expertise in the care of irregular migrants	NA	Barriers

Table A1 (contd)

Study	Country	Design
Sandhu et al., 2013 (61)	16 European countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Lithuania, the Netherlands, Poland, Portugal, Spain, Sweden, United Kingdom)	Qualitative semi-structured interviews
d'Ardenne et al., 2007 (62)	United Kingdom	Cohort study
Laban et al., 2005 (63)	The Netherlands	Community-based national study
Giacco et al., 2014 (64)	European countries, Australia, Canada, USA	Narrative review
Mucic, 2010 (65)	Denmark	Self-completed retrospective questionnaire survey
Martinez et al., 2015 (66)	NA	Systematic review
Betancourt, 2005 (67)	Russian Federation	Qualitative
Jakobsen et al., 2014 (68)	Norway	Cohort study
Vaage et al., 2010 (69)	Norway	Prospective cohort study
Burnett & Peel, 2001 (70)	United Kingdom	NA: expert opinion
Ekblad et al., 2012 (71)	Sweden	Cohort study
Bundespsychotherapeutenkammer (Federal Chamber of Psychotherapists), 2015 (72)	Germany	Recommendation by professional bodies

Population	Health condition studied	Focus of the study
17 psychiatrists, 9 mental health nurses, 5 psychologists, 1 therapist, 2 social workers, 14 managers in mental health services	NA	Barriers
239 refugees and asylum seekers	NA	Good practice models
Iraqi asylum seekers	Anxiety, depressive and somatoform disorders	Prevalence, risk factors
Immigrants (groups including political immigrants)	NA	Barriers, good practice models
45 refugees, 12 asylum seekers, 3 migrants, 1 domestic patient	NA	Good practice models
Irregular migrants	Anxiety, depression, PTSD	Barriers
57 Chechen adolescents	NA	Good practice models
160 male unaccompanied asylum-seeking adolescents	Agoraphobia, dysthymic disorder, generalized anxiety disorder, major depressive disorder, panic disorder, PTSD, social anxiety disorder	Prevalence
80 Vietnamese refugees	Trauma-related mental disorder	Prevalence, risk factors
Refugees and asylum seekers	Anxiety, depression	Good practice models
626 asylum seekers	NA	Good practice models
Asylum seekers	NA	Good practice models

Table A1 (contd)

Study	Country	Design
Maier et al., 2010 (74)	Switzerland	Cross-sectional study
van Melle et al., 2014 (74)	The Netherlands	Cross-sectional analysis
Lurie, 2009 (75)	Israel	Retrospective study
Field & Edwards, 2006 (76)	NA	NA: descriptive report
Straßmayr et al., 2012 (77)	14 European countries (Austria, Belgium, Czech Republic, France, Germany, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Spain, Sweden, United Kingdom)	Qualitative semi-structured interviews
Renner et al., 2012 (78)	Austria	Randomized controlled study

NA: not applicable.



Population	Health condition studied	Focus of the study
78 adult asylum seekers	Anxiety, major depression, PTSD	Barriers, prevalence
172 refugees	Common mental disorder (anxiety, depression, PTSD symptoms)	Prevalence
169 patient files (30 refugees and asylum seekers)	Acute stress disorder, major depression disorder, PTSD, schizophrenia	Prevalence
Refugees and asylum seekers	NA	Good practice models
25 experts in the field of mental health care for irregular migrants	NA	Barriers
63 refugees and asylum seekers	NA	Good practice models



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