The Mig-HealthCare Roadmap & Toolbox for the effective implementation of community care models for migrants & refugees
Mig-HealthCare - Strengthening Community Based Care to minimize health inequalities and improve the integration of vulnerable migrants and refugees into local communities.

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° Region of Sterea Ellada, Greece
° National Health Operations Centre (NaHOC), Ministry of Health, Greece
° Central Union of Greek Municipalities (KEDE), Greece
° Oxfam Italia, Italy
° Ethnomedical Center, Germany
° National Center of Infectious and Parasitic Diseases, Bulgaria
° Ecole des Hautes Etudes en Sante Publique, France
° CARDET, Cyprus
° KOPIN, Malta
° Uppsala University, Sweden
° Verein Multiculturell, Austria
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Suggested citation:
<table>
<thead>
<tr>
<th>Sections</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Language, Culture and Communication issues</td>
<td>11</td>
</tr>
<tr>
<td>Continuity of information</td>
<td>17</td>
</tr>
<tr>
<td>Mental Health</td>
<td>21</td>
</tr>
<tr>
<td>Vaccinations</td>
<td>25</td>
</tr>
<tr>
<td>Maternal and Child Health</td>
<td>29</td>
</tr>
<tr>
<td>Health Promotion</td>
<td>33</td>
</tr>
<tr>
<td>Oral Health – Dental Care</td>
<td>41</td>
</tr>
<tr>
<td>NCD’s and Chronic Conditions</td>
<td>45</td>
</tr>
<tr>
<td>The Mig-HealthCare Algorithm</td>
<td>48</td>
</tr>
<tr>
<td>References</td>
<td>57</td>
</tr>
</tbody>
</table>
Introduction

Since the Middle East crisis began in 2011 Europe has seen increased flows of migrants and refugees arriving mainly at the Mediterranean shores. According to UNHCR data, 70.8 million people were forcibly displaced from their homes. Since 2015, over 2,000,000 refugees and migrants arrived in Europe, while large migrant/refugee flows continue to arrive to date. The need to address migrant/refugee health issues and facilitate health care access for this vulnerable population group is increasing.

The UN’s Covenant on Economic, Social and Cultural Rights, article 12.1 cites that “The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” (UN 1966). In the European context, the Charter of Fundamental Rights states that everyone should have the right to access preventive health care and to benefit from medical treatment. Still, problems in health care access for migrants and refugees exist.

Evidence from the literature review conducted by the Mig-HealthCare consortium on migrant and refugee access to healthcare shows that inequalities between migrants and non-migrants in health and in access to health care services persist.

Inequalities are the result of legal barriers that exist in many EU MS in accessing care among migrants, refugees and asylum seekers and especially undocumented migrants. However, inequalities are also attributed to the economic situation of migrants who may lack the means to access or to pay for health services. Inequalities are also the result of language barriers, discrimination and what is referred to in many articles as lack of cultural competence from healthcare providers (Lebano et al., 2018).

Migrant and refugee populations in Europe are in general young healthy adults, but they also include a substantial proportion of families, elderly and disabled people (WHO, 2018). Their health needs place them in a dis-
advantaged position as a result of exposure to many risk factors, such as long and perilous journeys, homelessness, lack of insurance coverage, exposure to violence, mental and physical trauma and exploitation (WHO, 2018). These are indications that migrant and refugee populations may present with worse health outcomes than the host population, such as increased infant mortality, adverse gynaecological outcomes and unregulated chronic disease outcomes. Moreover, factors such as cultural and language barriers, unemployment or low paid, illegal or insecure jobs put them at increased health risks (WHO, 2018).

The Mig-HealthCare project

Mig-HealthCare - strengthening Community Based Care to minimize health inequalities and improve the integration of vulnerable migrants and refugees into local communities, is a three year project that was launched in May 2017, with the financial support of the European Commission. The project is implemented by a consortium of Universities, national authorities and NGOs from ten countries across Europe, with diverse experience on issues of public health and integration of refugees and migrants.

The overall objective of Mig-HealthCare is to improve health care access for vulnerable migrants and refugees, support their inclusion and participation in European communities and reduce health inequalities.

What is included in the Mig-HealthCare Roadmap and Toolbox?

The Roadmap & Toolbox is a user-friendly online application which focuses on the key steps for optimal health care delivery to migrants and refugees including useful tools that can be used either by healthcare professionals or migrants and refugees as well as examples of best practices. It also includes an algorithm, to be used as a guide for health professionals that can assist in providing better health to patients from a migrant/refugee background.

The online version can be found at the project’s relevant website section: https://www.mighealthcare.eu/roadmap-and-toolbox.

The Mig-HealthCare Roadmap comprises:

1. The necessary actions a health professional needs to engage in during delivery of care to migrants and refugees, namely:
   - Continuity of information
   - Language, Culture & Communication Issues
     - Language and communication
     - Cultural issues
     - Health literacy

2. Information concerning health issues of particular importance for migrants and refugees:
   - Mental Health
   - Vaccinations
   - Maternal/child health
   - Health promotion
     - Cervical and Breast cancer screening
     - Colorectal cancer screening
     - Alcohol
     - Smoking
     - Nutrition
     - Physical activity
   - Oral Health/Dental Care
   - Non-Communicable diseases (NCDs) & chronic conditions

3. Promising practices

   The Mig-HealthCare partners reviewed and evaluated relevant interventions that address health issues among migrants/refugees. Some of these interventions which were positively evaluated and are considered as Best Practices could be used in different settings. More information about these and other promising practices can be found on the project’s website http://www.mighealthcare.eu/ by accessing the report titled ‘D5.1: Report on models of community health and social care and best practices’ here: https://mighealthcare.eu/resources/D5.1%203%20Models%20of%20community%20health%20and%20good%20practices.pdf

4. Tools

   The toolbox includes approximately 300 tools belonging to the different
categories mentioned above. The toolbox can be accessed directly from the Mig-HealthCare website or through the different Roadmap categories. Searching for tools is facilitated by various filters (thematic category, language, end user, type of material).

5. The algorithm

The Mig-HealthCare algorithm is a tool to guide health professionals through all the necessary steps on identifying health issues of particular importance when delivering care to migrants/refugees.

Who is the Roadmap and Toolbox for?

This roadmap is a valuable and useful resource for a wide variety of health professionals at the individual as well as the organizational level. Targeted stakeholders include:

› Health professionals of all specialties, including medical doctors and nurses working at different levels, local, regional and national
› Health care administrators
› Managers and staff of health care services, including hospitals and health care centers at local, regional and national levels
› NGOs
› Local authorities

How to use the Mig-HealthCare Roadmap and Toolbox?

Health professionals can refer to the Roadmap and Toolbox content at any time to receive information on the issues of importance when delivering health care to migrants/refugees. One can refer to specific health issues presented in the Roadmap, when it is necessary to address a particular problem, or consult the content in its entirety. Indicatively:

› Health professionals but also community level stakeholders can use tools or adapt best practice examples as described in the Roadmap and Toolbox for the particular situation in their community.
› Health professionals can use the tools that are presented under each health issue for their patients or to facilitate their work.

› Health professionals can use the algorithm when they are consulting a migrant/refugee patient to ensure they address the issues of importance the Mig-HealthCare project has identified for the health of migrants/refugees.

How was the Roadmap and Toolbox developed?

The Roadmap and Toolbox was created as part of the Mig-HealthCare project following extensive research on:

› Needs and gaps in the delivery of health care to migrants and refugees, as identified by health professionals through original research. Focus groups and interviews were conducted in 10 EU countries (Greece, Cyprus, Germany, Bulgaria, Sweden, Spain, Austria, Italy, Malta and France).
› A systematic review of promising practices conducted in the European Union and worldwide.
› A survey conducted among 1.350 migrants and refugees in 10 EU countries (Greece, Cyprus, Germany, Bulgaria, Sweden, Spain, Austria, Italy, Malta and France) concerning their health status, health problems and access to health care.
› A literature review in 10 EU countries and internationally concerning the health care problems of migrants and refugees. Identification of relevant tools at EU level and internationally.

Detailed reports of all of the above are available from the Mig-HealthCare website.

Access the Roadmap and Toolbox

This publication presents a short description of the thematic categories of the Roadmap and Toolbox as well as the algorithm. The full Roadmap and Toolbox is available from the Mig-HealthCare website - https://mighealthcare.eu/roadmap-and-toolbox where access to more information, promising practices and tools for each thematic category is provided. Indicatively, through the Toolbox you can access more than 300 different tools in different languages.
Language and Communication

The World Health Organisation (WHO) states that globally only an estimated 600 to 700 million people use English as a second language, in addition to 335 million native English speakers. This leaves most of the world's population, around six billion people, with little or no access to a large wealth of public health information because it is in English.

Language is considered as a significant barrier to accessing high quality health care. “In public health, the linguistic disconnect between those providing health information and those who need that information affects everyone from clinicians and patients to public health managers and policy-makers” (WHO, 2015, p.365).

Communication is key to quality health care and a central feature of every interaction (White et al., 2015). One of patients’ most important needs is to communicate their symptoms and situations to healthcare professionals.

Effective doctor-patient communication can result in better health outcomes, contributing to the overall health of the community. Not being able to speak the host country language poses a significant barrier to effective communication.

Multiculturalism and multilingualism have become extremely common in Europe, resulting in language barriers in the healthcare setting. Patients whose first language is not the same as that of the healthcare service they attend will most likely experience poorer health outcomes (Divi et al., 2007). Although many large healthcare institutions have access to interpreter services which has strongly been associated to improved patient satisfaction and positive communication, the availability of interpreters is
not sufficient to ensure high-quality health care. An in-depth survey of 39 immigrant Somali women at a London obstetric centre demonstrated that the availability of translators alone is insufficient to overcome cultural barriers (Binder et al., 2012).

Important steps/ requirements for the Health care sector

It is important that migrants/refugees receive appropriate language services, such as interpreters, within the health care service. According to the Australian Psychological Society (2013), facilitating effective communication via an interpreter should include the following:

› Speak to the person, not the interpreter. Try to maintain culturally appropriate eye contact with the patient, even when the interpreter is interpreting. When speaking or listening, watch the patient rather than the interpreter, so nonverbal messages can be observed. Speak to the patient directly using first person “I” and second person “you”, rather than “he” or “she”. This way you can elicit a more accurate understanding of the words and emotions being expressed.
› Avoid using technical language, metaphors and acronyms.
› Repetition can help understanding.
› Use short, simple sentences.
› Pause after one or two sentences to allow the interpreter to relay the message.
› Health professionals may use diagrams or pictures to increase understanding.
› Ask the patient whether you are speaking at an appropriate pace or if any clarification is required.
› Ask for feedback during the consultations to ensure that the patient is satisfied with the interpreting process.

Cultural issues

With the increase in the population of migrants in Europe, cultural competence has been advocated as a way to ensure equity in access to health care and to provide responsive healthcare to migrants and refugees (Jongen, McCalman & Bainbridge, 2018). Culture is defined as the “patterns of ideas, customs, and behaviors shared by particular people or society. These patterns identify members as part of a group and distinguish members from other groups” (How Culture Influences Health, 2017).

The concept of cultural competence was introduced in the 1980s to address a gap in healthcare providers’ ability to promote equitable and non-discriminatory care for diverse populations. Since then, a range of cultural competence frameworks have emerged focusing on various issues including knowledge of minority cultures, attitudes to minorities and newly arrived immigrants and skills for providing health care via translators and in collaboration with cultural mediators. The concept of cultural competence has evolved over time to include not only the interaction between healthcare providers and users but also organisational and systemic cultural competence (Truong, Paradies & Priest, 2014).

Important steps/ requirements for the Health care sector

Improving cultural competence among health care personnel is crucial. It enables a health professional to provide effective health care without relying on stereotypes. According to a report on health challenges for refugees and immigrants (Bischoff, 2003), providers must consider cultural factors when they:

› Take a medical history and physical exam: Patients’ individual migration history has an impact on their illness experience. Hence, it is important for health care professionals to learn about their life and social circumstances. Aspects such as life history, experience of pain, traditional/religious healing practices, nutrition (food customs), proficiency of local language, work and residence status, experience of violence, migration history (reasons for migration, experience of trauma, history of flight and integration) need to be addressed.
› Assess care needs: The health care provider should view illness in a broader social context, rather than as an individual concern. This involves differentiating between cure and treatment, sharing knowledge of health and wellness information, and involving the patients’ family and community in medical decisions (Burgess, 204).
Additionally, in order for health care providers to become more culturally competent it has been suggested (Bernd, 2011) to:

- elicit patients’ language, culture and ethnic group
- be aware of cultural stereotypes
- avoid using patients’ families as interpreters
- familiarize oneself with culturally specific expressions of distress
- maintain confidentiality
- avoid religious and social taboos
- use same-sex chaperones
- allow culturally specific rituals, for example, after death
- not make assumptions.

**Health Literacy**

According to Sørensen et al. (2012) health literacy concerns the knowledge and competencies of persons to meet the complex demands of health in modern societies:

“Health literacy is linked to literacy and entails people’s knowledge, motivation and competencies to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course.”

***Limited health literacy is more common among patients who have low educational attainment and among older patients, and ethnic minorities and migrants.***

According to Zanchetta and Poureslami (2006), health literacy in newcomer communities with diverse ethno cultural backgrounds is less understood by health professionals compared to other barriers such as language and cultural differences hindering access to healthcare services and health information that is available to them.

Addressing health literacy through healthcare services is challenging (Lee, Arozullah, & Cho, 2004; Nielsen-Bohlman et al., 2004). Interventions addressing factors such as adherence to treatment (Van Servellen et al., 2003, 2005), the adoption of preventive behaviour such as screening and the reasonable use of antibiotics (Stockwell et al., 2010), are influenced by health literacy. In this regard, the incorporation of skills to navigate the healthcare system has shown efficacy (Soto-Mas et al., 2015 a,b; Yung-Mei et al., 2015).

On the other hand, a greater understanding of the capacities and needs of patients with limited health literacy is needed in order to develop strategies to establish effective means to communicate with them (Paashe-Orlow & Wolf, 2007). In this regard, healthcare providers and health systems will be able to accommodate the needs of patients with limited health literacy being more aware of their needs.

**Toolbox**

Please access our toolbox for additional tools related to Language, Culture and Communication issues among migrants and refugees on the following link: https://mighealthcare.eu/index.php?option=com_wizard&view=wizard&layout=toolboxfilter&catSelected=2&subCatSel=&langSelected=&materialSel=0&taskSel=0&endSel=0.
Continuity of information

Populations on the move have distinct health patterns, including several vulnerabilities, such as communicable food and waterborne diseases due to the hardship of travel and increased prevalence of vaccine-preventable diseases. Migrants and refugees often mismanage or are forced to avoid the management of non-communicable diseases, often use inappropriate medication which may accentuate the problem of antimicrobial resistance, and experience mental health issues due to trauma, torture and migration. All of the above may result in increased morbidity and mortality in an already vulnerable population.

According to the UNHCR New York Declaration, signed by 193 Member States in the UN Summit of September 2016, the States undertake the responsibility of responding to the health needs of refugees and migrants arriving in their countries focusing especially on vulnerabilities and specific health needs experienced by populations on the move, such as prevention, treatment, basic health education and psychosocial support aiming at improving integration and inclusion in the host societies (Matlin et al., 2018).

It is true that the ability of the health systems to respond to the increased migrant and refugee health needs since 2015 has been challenged. There is need for a generalised approach to strengthen public health and health systems to effectively address the health needs of migrants and refugees. One of the key factors of optimal delivery of health care is ensuring continuity of health information, ensuring in other words that medical histories of migrants-refugees arriving in Europe are available for services throughout the migrant and refugee journey. Details of the health profile of migrants and refugees are in many cases unavailable or relevant documentation is missing or lost. Information on the patient’s medical history, family history, types of treatment, vaccinations and counseling received will ensure continuity in health care delivery.
To this end it is necessary to adopt a unified tool that will be used to facilitate health assessment, and will create a line of communication across States and across different services that can retrace the medical history of these populations.

This way health data will be available in other countries within Europe as migrants and refugees move and in this way their integration into the national health systems of the host countries will be facilitated.

Important steps/requirements for the Health care sector

Monitoring the health status of refugees and migrants as mentioned above is important to sustain and promote their own health as well as public health in host countries. Given the high mobility and diversity of these populations, the electronic personal health record is suggested as an important way of capturing medical history information and making it available for various health settings throughout the migrant and refugee journey. The personal electronic health record (PHR) has the advantage of easy accessibility, provided there is a portable device and the appropriate software that will enable the healthcare professionals to access and update relevant information.

The Personal Health Record (PHR) contains all the necessary health data of the refugees/migrants arriving in the EU. It therefore gives health professionals the opportunity to assess an individual’s health status and makes this information available to other professionals ensuring that duplication of efforts is avoided. The contents and use of such records are covered by the requirements of the European legislation on data protection. It is also important before using PHR to explore whether this method is acceptable by the target population, and that necessary training has been provided to health professionals concerning proper use and being in line with existing policies and legislative requirements.

By obtaining personal medical information which will be available for other professionals, enabling hence continuity of information, every effort should be taken to receive written or oral consent by explaining the process of data collection and its use, especially since we are referring to electronic personal health records. All ethical principles must be followed according to the current standards and practices (Bonomi, 2016).

Electronic health records be thus used in order to:

› facilitate health data collection, processing and transfer across health services
› support clinical decision making
› account for the loss of paper documentation.

Please access our toolbox for additional tools related to “Continuity of Information” among migrants and refugees on the following link: https://mighealthcare.eu/index.php?option=com_wizard&view=wizard&layout=toolboxfilter&catSelected=1&subCatSel=&langSelected=&materialSel=0&targetSel=0&endSel=0
Migrants and refugees coming to Europe have often confronted traumatic experiences, such as war and persecution in their countries of origin. Displacement (including forced displacement), hardship in transit countries and dangerous travels together with lack of information, uncertainty about the future and hostility in host countries are just some of the additional factors causing stress. These kinds of situations require that people are able to adapt quickly to new situations while it is common that pre-existing social and mental health problems among migrants and refugees can be exacerbated due to the new conditions they face in host countries. (Ventevogel et al., 2015).

A 2018 survey study among migrants and refugees within the Mig-HealthCare project investigated the prevalence of mental illness among migrants and refugees across 10 European countries. The study found that 29.6% of participants reported suffering from psychological diseases, including depression, anxiety, worry and stress.

The survey also generated a SF-36 score for overall mental health for each participant, with values from 0 to 100 and lower scores indicating greater disability. Researchers found an average mental health SF-36 score of 60.1 (SD 21.4) across all participants, which is lower than the normative scores for EU populations, which lie above 65. However, these scores varied significantly by country of origin. The highest average mental health scores were reported by migrants from Nigeria (65.0) and Syria (64.2), and the lowest were reported by migrants from Iran (50.6) and Afghanistan (51.0). Average scores also varied by country of current location, with the highest refugee and migrant mental health scores reported in Sweden (65.1) and Italy (65.3), and the lowest reported in Cyprus (53.6) and Greece (53.7).
Other relevant studies show that:

› The rate of post-traumatic stress disorders (PTSD) is higher among refugees due to forced displacement.
› There is a tendency among refugees who have lived in a host country for more than five years to be more likely suffering of depressive and anxiety disorders than the host population.
› Mental disorders are more prevalent among long-term refugees, as they lack social integration and employment.

(Mental health promotion and mental health care in refugees and migrants - Technical guidance, 2018).

The WHO outlines the following risk factors and stressors that contribute to poor mental health among migrants/refugees:

› Pre-departure:
  o Exposure to war and persecution
  o Economic hardship
› Travel and transit:
  o Life-threatening events
  o Physical harm
  o Human trafficking
› Arrival:
  o Residing in a country intended as "country of transit"
  o Poor living conditions
› Integration:
  o Poor living conditions
  o Acculturation difficulties – Acculturation is defined as the adoption of the host country’s cultural habits, customs and behaviors by the individual, which exerts a significant role in the change of attitudes regarding health-related issues (Joshi et al., 2014).
  o Issues with obtaining entitlement and detention
  o Social isolation and unemployment
  o Facing return

Important steps/ requirements for the Health care sector

Mental health issues of particular interest for migrants/refugees are:

› Post-traumatic Stress Disorder (PTSD)
› Insomnia
› Acculturative stress

In terms of health care services, the WHO (2018) recommends the following:

› Promoting mental health through social integration
› Clarifying and sharing information on entitlements to care
› Mapping outreach services (or setting up new services if required)
› Making interpreting services and/or cultural mediation services available, including through information technology
› Working towards integration of mental, physical and social care
› Ensuring that the mental health workforce is trained to work with migrants

In terms of service planning and evaluation, which is crucial for the improvement of mental health care provided to refugees and migrants, the WHO (2018) gives two main recommendations:

› Investing in long-term follow-up research studies and service evaluations in order to better inform service planning and provision
› Sharing principles of good practices across countries

(Mental health promotion and mental health care in refugees and migrants Technical guidance, 2018).

The International Organisation for Migration (IOM) has formulated 11 practice principles for promoting mental health and psychosocial well-being (Ventevogel et al., 2015):

› Treat all people with dignity and respect and support self-reliance
› Respond to people in distress in a humane and supportive way
› Provide information about services, supports and legal rights and obligations
› Provide relevant psycho-education and use appropriate language
› Prioritize protection and psychosocial support for children, in particular children who are separated, unaccompanied and with special needs
› Strengthen family support
› Identify and protect persons with specific needs
› Make interventions culturally relevant and ensure adequate interpretation
› Provide treatment for people with severe mental disorders
› Do not start psychotherapeutic treatments that need follow up, when follow up is unlikely to be possible
› Monitor and manage wellbeing of staff and volunteers.

Please access our toolbox for additional tools related to the management of “Mental Health” issues among migrants and refugees on the following link: https://mighealthcare.eu/index.php?option=com_wizard&view=wizard&layout=toolboxfilter&catSelected=5&subCatSel=&langSelected=&materialSel=0&targetSel=0&endSel=0

Vaccinations

Migrants and refugees are exposed to significant risk factors for communicable diseases. They undertake long journeys from war affected countries that are endemic in poverty-related diseases. The national healthcare service in countries of origin is often disrupted due to political and economic crisis and instability. It is important to state though that according to WHO, there is little evidence of an association between migration/refugee flows and the importation of infectious diseases¹. The Mig-HealthCare project also offers evidence that migrants/refugees do not pose a threat of infectious disease in the host countries - https://mighealthcare.eu/e-library

In 2016, WHO-UNHCR-UNICEF stated that migrants, asylum seekers and refugees should have “non-discriminatory and equitable” access to vaccinations and recommended to vaccinate migrants in accordance with the immunization programs of the hosting country². It is usually difficult to reach migrant populations to ensure that vaccination schedules are followed due to several challenges: 1) movement of migrants and refugees among European countries; 2) lack of information about immunization status of migrants and refugees; 3) avoiding registration and vaccination; 4) limited access to screening services; 5) lack of coordination among public health services of neighboring countries (Mipatrini et al., 2017).

A 2018 survey study of migrants and refugees in 10 countries across Europe within the Mig-HealthCare project demonstrated the alarmingly low rate of vaccination among migrant and refugee populations in Europe. More than 73% of participants did not report having a vaccina-

Immunization numbers for eight diseases are presented in Table 1.

Table 1: Immunization coverage among adult migrants and refugees (in present country or in country of entry to the EU)

<table>
<thead>
<tr>
<th>Disease</th>
<th>% don't know</th>
<th>% No</th>
<th>% Yes</th>
<th>N*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis A</td>
<td>16.9</td>
<td>68.0</td>
<td>15.2</td>
<td>1,030</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>14.9</td>
<td>67.4</td>
<td>17.7</td>
<td>1,024</td>
</tr>
<tr>
<td>Influenza</td>
<td>16.3</td>
<td>76.8</td>
<td>6.9</td>
<td>954</td>
</tr>
<tr>
<td>Measles</td>
<td>16.0</td>
<td>70.1</td>
<td>13.9</td>
<td>1,006</td>
</tr>
<tr>
<td>Pneumococcus (pneumonia)</td>
<td>16.3</td>
<td>70.9</td>
<td>14.8</td>
<td>1,008</td>
</tr>
<tr>
<td>Polio</td>
<td>15.7</td>
<td>69.5</td>
<td>14.8</td>
<td>1,003</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>15.2</td>
<td>68.7</td>
<td>16.1</td>
<td>1,008</td>
</tr>
<tr>
<td>Tetanus</td>
<td>14.7</td>
<td>64.0</td>
<td>21.3</td>
<td>1,027</td>
</tr>
</tbody>
</table>


The vaccine preventable diseases of particular interest for migrants/refugees include the following:

**Hepatitis B**

Studies concerning the prevalence of HBV among migrants and refugees showed a seroprevalence of active infection of 7.2% and an overall seroprevalence (including markers of prior infection) of 39.7% (Rossi, 2012). The risk was higher for migrants from East Asia and Sub-Saharan Africa. A systematic review reported a prevalence of HBsAg in migrants ranging from 1.0 to 15.4%, 2-6 fold higher than that of the general population (Hahne et al., 2013).

**Measles, mumps, and rubella**

Studies showed insufficient data on measles outbreaks and vaccination coverage among migrants in Europe. Prevalence of seronegative individuals among migrants was found to vary between 6 and 13%; children were at higher risk to be unvaccinated (Jablonka et al., 2016). Foreign-born children in Germany had 3-fold higher risk of being unvaccinated than German-born children (Poethko-Mulle et al., 2009). Concerning mumps, seronegative individuals were 10.2% among newly arrived refugees in Germany (Jablonka et al., 2016). Similar findings were reported from Sweden and the UK.

**Poliomyelitis**

In Germany, less than 15% of Syrian children refugees were vaccinated, while in France, the vaccination coverage among HIV-infected migrants was 64.4% (Bottcher et al., 2015; Mullaert et al., 2015).

**Tetanus**

Studies showed lower rate of the vaccination coverage among migrants in comparison to EU-born individuals. In Switzerland, only 27% of newly arrived migrant children had antibodies against diphtheria-tetanus-pertussis (de la Fuente et al., 2013).

**Diphtheria**

In France, a seroprevalence rate of 69% of antibodies against diphtheria among HIV-infected migrants was found (Mullaert et al., 2015).

**Varicella**

Studies in Germany showed that 3.3% of newly arrived in 2016 asylum seekers were seronegative for IgG against varicella virus (de Valliere et al., 2011).

**Important steps/ requirements for the Health care sector**

Provision of health care at reception centers of newly arrived migrants and refugees should be comprehensive, integrated and person-centered. Measures to reduce the risk of communicable diseases include implementation of health prevention and management. Access to vaccination is of prime importance. Vaccinations for migrants and refugees should
be considered in accordance with national guidelines. Vaccination records should be provided to migrants and refugees, especially when they are moving between countries.

According to ECDC and WHO, vaccinations for migrants and refugees may include:

- Measles-mumps-rubella for children ≤15 years;
- Poliomyelitis for children and adults originating from countries at high risk;
- Meningococcal disease (tetravalent vaccines against meningococcal serogroups A, C, W-135 and Y or, against serogroups A and/or C);
- Tetanus-pertussis-diphtheria;
- Influenza, according to the season (Bradby et al., 2015).

To tackle obstacles to vaccination, WHO proposes to:

- Tailor immunization services
- Strengthen communication toward specific population groups

_Toolbox_

Please access our toolbox for additional tools related to “Vaccination” among migrants and refugees on the following link: https://mighealthcare.eu/index.php?option=com_wizard&view=wizard&layout=toolboxfilter&catSelected=6&subCatSel=&langSelected=&materialSel=0&targetSel=0&endSel=0

Maternal and Child Health

Women make up approximately 52% of the migrant population (IOM, 2017). As a result, maternal health care is a significant issue in the provision of health care to migrants.

*Most research shows poorer maternal and new-born health outcomes for migrants and refugees compared to their respective host populations.*

Migrant women generally face poorer pregnancy outcomes compared to native women, as reflected in the higher incidence of induced abortions, caesarean sections, instrumental deliveries and other complications among migrants (Keygneart et al., 2016). In addition, migrant women face higher incidence of postpartum depression. Although these outcomes vary among different migrant groups and between and within host countries (WHO, 2018), it has been found that newly arrived migrant women, especially if they are in their final stages of pregnancy or have uncertain legal status, are particularly at risk of negative outcomes (Gissler et al., 2010; Hayes, Enohumah & McCaul, 2011). According to a meta-analysis in 2014, migrant women in Western European countries are twice as likely to die during or shortly after pregnancy (Pedersen et al., 2014).

Besides increased maternal mortality and morbidity among migrant women, WHO (2018) has identified a marked trend for the worse pregnancy-related indicators in migrants. Although these factors vary depending on host country, country of origin and outcome, they include:

- mental ill health, such as postpartum depression
- perinatal and neonatal morbidity and mortality (e.g. stillbirth, preterm birth and congenital anomalies)
- suboptimal quality of care

This higher risk profile of maternal health complications can be a result of different contributing factors, such as cultural, biological, socioeconomic
or related to the migrant journey. However, studies have noted that a substantial part of the increased morbidity and mortality among migrant women must be sought in suboptimal healthcare factors in the respective host countries (Van den Akker, 2016; Keynaert et al., 2016):

- Access to and uptake of antenatal care
- The quality of services offered, including the ability of health services to cater to diverse patients
- Access to and comprehensibility of the health systems

In general, the highest risk to experiencing suboptimal healthcare factors has been observed among the most recent migrant groups, most often of non-European nationality (Almeida, 2013; Pedersen et al., 2014; Grech, Tratnik, & Pisani, 2016).

**Important steps/ requirements for the Health care sector**

WHO refers to certain issues that are particularly problematic for refugee and migrant women. These include but are not limited to:

- feeling understood and supported by health care providers and being able to actively engage with them
- knowing how to find good health information, as well as being able to read and understand it well enough for active management of personal health
- having social support for their health; and
- understanding the health care system in order to navigate it

**Recommendations:**

- Use plain-language health information activities and materials such as workshops, brochures and advertising campaigns with content on maternal health care and corresponding health risks which is socio-culturally appropriate (both antenatal and postnatal)
- Develop information content in the target group’s native language about warning signs of pregnancy and navigation of the health care system, as well as provide social support during antenatal care;
- Share responsibility to increase health literacy of migrant and refugee women between stakeholders, including government agencies, health care facilities and practitioners, educators and community and religious based organizations.
- Implement or support initiatives that pair pregnant migrant women with women from a similar background who have already experienced giving birth in the respective host society.

Providing quality care to migrant and refugee women has often been compromised due to language barriers, cultural differences (e.g. type of gender of health practitioner), and differences in conceptions of motherhood, health, expectations from health care and so on (Almeida, 2013; WHO, 2018). Some recommendations to deal with this particularly vulnerable population follow below:

- Make screening processes during pregnancy available for all;
- Adopt a person-centred model of care that involves the same quality of care to all pregnant women (e.g. timeliness, information, respect, sufficient diagnostics, adequate management and transport), regardless of migration status, and that is sensitive to diversity;
- Refer refugee and migrant women to a higher level of care, if a risk assessment suggests that they should be screened for tuberculosis, pre-eclampsia and a small for gestational-age fetus;
- Use professional interpreters and cultural mediators when needed, rather than family members, to facilitate communication between medical staff and refugee and migrant women. Consider telephone sessions as a cost-effective alternative when face-to-face interpreting services are not an option.

**Toolbox**

Please access our toolbox for additional tools related to “Maternal and Child Health” among migrants and refugees on the following link: https://mighealthcare.eu/index.php?option=com_wizard&view=wizard&layout=toolboxfilter&catSelected=7&subCatSel=&langSelected=&materialSel=0&targetSel=0&endSel=0
Health is considered a basic human need and human right (WHO, 2017). Health promotion as defined in the Ottawa Charter (WHO, 1986) is ‘the process of enabling people to increase control over and improve their health’. Health is seen as a resource for everyday life, not the objective of living.

This is not always upheld in the case of migrants/refugees. There are a number of cases showing the inhumane conditions existing in reception centres and camps especially in first entry countries (Agier et al., 2018).

In general, migrants coming to Europe are in comparatively good health on their arrival and preliminary residential period within a host country. This condition which is referred to as the healthy migrant effect may be largely explained through the fact of social selection and state screening (Constant, Garcia- Muñoz, Neuman & Neuman, 2018). Often the healthier and younger members of a society will choose or have the necessary resources to undertake the hazardous migrant journey from Africa, Syria, Afghanistan and other strife ridden countries. However, it is equally true that their health is likely to deteriorate following arrival due to poor housing and living conditions, which are major determinants of health. Recent work in global public health ethics has argued that migrant health may be considered as a public global good (Widdows & Marway, 2015). This adds further weight to humanitarian arguments (Wild & Dawson, 2018) that it is vital to protect and promote the health of migrants for the good of all in society.

Issue related to health promotion among migrants and refugees include cervical and breast cancer screening, colorectal cancer screening, smoking, issues related to nutrition and physical activity.

**Cervical and breast cancer screening**

Breast cancer is the most common female cancer in the world, while cervical cancer is the most common cancer in women in low and middle income countries (WHO, 2017). Breast cancer screening is performed with the use
of mammography in women aged 50-64 years combined with monthly self-breast examination, unless there are other specific risk factors that place a woman at higher risk for breast cancer such as family history (Perry et al., 2008). Cervical cancer screening at the population level is carried out with the use of cytology in detecting lesions in a cervical smear sample targeting women aged 25 to 65 years of age. (European Guidelines for Quality Assurance in cervical cancer screening, 2008). It has been shown that cultural and religious differences in immigrant populations along with language difficulties and dissatisfaction from the healthcare systems account for lower participation to organised cervical cancer screening activities (Rosano et al., 2017).

It is necessary to address cancer screening at the community level through culturally sensitive and linguistically appropriate services and raise awareness about the prevention of cancers, such as cervical and breast cancer.

Findings from the 2018 Mig-Healthcare survey, conducted across 10 European countries, suggest that the rate of cancer screening among refugees and migrants is low. Only 5.1% of participants reported having had a colonoscopy. Of the female participants from this study, 20.4% had ever had a Pap test and 12.8% had ever had a mammogram.

Colorectal cancer screening

Colorectal cancer claimed the lives of 154,000 people in the EU-28 in 2015, which corresponds to 11.7 % of all deaths from cancer and 3.0 % of the total number of deaths from any cause. Of these deaths, 3.3 % were in men and 2.6 % in women (EUROSTAT, 2018).

Migrant and refugee population’s perception of colorectal cancer suggests that they do not consider colorectal cancer as risky compared to the local population. Hence their participation in colorectal cancer screening (with any screening test) is very low which in many cases leads to colon cancer diagnosis at a later stage (Punzo & Rosano, 2018). However, data show that the incidence of colorectal cancer among recent immigrants in a host country is lower than the incidence in the local population, probably as an expression of the healthy immigrant effect. However, this trend diminishes over time. It is estimated that 10 years after settlement in the host country, immigrants adopt the cancer risk profile of the host country.

As such, there is need to address the issue of colorectal cancer screening participation of refugees and migrants through tools and interventions that are linked to better health (Shuldiner et al., 2018).

Alcohol

Concerns have been expressed about hazardous and harmful alcohol use amongst populations who have been forcibly displaced from their homes by armed conflict, human rights abuse and persecution (Johnson 1996; De Jong et al., 2002; UNHCR/WHO, 2008). Recent findings suggest that the highest prevalence estimates of hazardous/harmful alcohol use ranged from 17%-36% in camp settings and 4%-7% in community settings among refugees, internally displaced persons (IDPs) and asylum seekers (Horyniak et al., 2016). Relocation commonly leads to worse living conditions, impoverishment and the loss of family, friends, assets, livelihoods and self-esteem, as well as cultural and social support (Miller 2004; Porter & Haslam, 2005). Excessive stress and anxiety may lead to post-traumatic stress disorder (PTSD) and depression, which further deteriorate mental status, increasing thus the risk of alcohol consumption (Kozaric-Kovacic, Ljubin & Grappe, 2000).

In refugee camp settings it is essential to acknowledge the existence of substance related problems. Furthermore, availability and access to treatment services for displaced populations is another challenging issue. Refugees may not be allowed to utilize local treatment services, services can be expensive, or refugees may not have access to services out of the camps. Cultural and language differences add more complexity to this situation.

Interventions to minimise harmful use of alcohol and other psychoactive substances can lead to positive changes but must be customised to the specific needs of each setting.

Rapid assessments with appropriate tools, understanding the situation, partnership with workers and refugees, as well as inclusive approaches are all essential.

Tobacco use

Little evidence is available regarding tobacco and substance use in par-
ticular among migrants/refugees in Europe. From the available evidence, in contrast to the comparatively lower rates of substance abuse among migrants and refugees, levels of smoking among migrant men were higher, as shown by studies conducted in France and Finland (Khlat & Guillot, 2017; Salama et al., 2018; WHO, 2018). More specifically, migrant men in the two countries had significantly higher rates of smoking compared to migrant women from the same countries of origin and non-migrants.

Health behaviors of migrant and refugee populations, including smoking are mainly determined by the place of origin, cultural background, gender and age (Salama et al., 2018). A significant factor influencing the prevalence and frequency of smoking among different individuals is acculturation. A study evaluating the migration-related changes of smoking, uncovered the low pre-migration prevalence and the diversity of post-migration trajectories, suggesting that tobacco control programs targeting recently arrived migrants would contribute to prevent unhealthy assimilation (Khlat et al., 2018). Another study in Turkish immigrants’ smoking behaviour showed that they adapted their behaviour towards the one of the Dutch/German majority population as the duration of stay was increasing (Reiss, Lehnhardt & Razum, 2015). The new environment thus exerts a key role on either improving or deteriorating the overall health and well-being of migrant populations.

Few programs focus on the prevention and cessation of tobacco use on migrant and refugee populations. According to a study on smoking behaviors of migrants in Austria, the existing intercultural differences of people with or without migrant background define attitudes towards smoking, addictive behaviors and preferences on cessation programs (Urban et al., 2015).

Due to differences between cultural backgrounds, language and attitudes, a strong demand for tailor made preventive and cessation programs exists and needs to be met.

Nutrition

There are various issues related to healthy nutrition that are of importance to migrants/refugees including malnutrition, undernutrition, and food insecurity and also Vitamin A, D and B12 deficiency, anemia and iron deficiency, and obesity.

Food insecurity

Food insecurity is defined by the United States Department of Agriculture (USDA) as a situation of “limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways”.

High levels of food insecurity are recorded among resettled refugees due to various reasons including low language proficiency and limited job skills (Gunell et al., 2015), as well as difficulties adapting to the new country (FAO and OPM, 2018).

Malnutrition - Undernutrition (wasting, stunting, underweight)

Malnutrition in all its forms, and especially micronutrient malnutrition and under-nutrition are considered of major importance as regards refugees’ health. The United Nations High Commissioner for Refugees (UNHCR) recognizes malnutrition not only as a physiological condition, but also as a human rights issue (UNHCR/WFP, 2006). Causes of malnutrition include various interrelated factors such as disease, poor caring practices, poor environmental conditions, as well as lack of access to and availability of nutritious food (UNHCR, 2011). Refugee and migrant children tend to be more prone to diet-related health issues, both malnutrition and overweight/obesity (WHO, 2018c).

Malnutrition and micronutrient deficiencies may have a detrimental impact on refugee children's future. Thus it is important to screen for these conditions and to conduct short and long-term follow-up to minimize potential health adverse effects (UNHCR, 2019a, 2019b). Special focus should also be given on breastfeeding, as breastfeeding helps prevent malnutrition, certain diseases and mortality among infants and young children. The UNHCR has developed a policy related to the acceptance, distribution and use of milk products in refugee settings, so as to protect and promote breastfeeding (UNHCR, 2006).

According to the 2013 International Organization for Migration Nutrition Surveillance Reports evaluating 9,063 refugee children aged 6-59 months (12% of all refugees examined in 2013), medium prevalence of wasting (5.3%), low prevalence of stunting (17.6%) and low prevalence of underweight (8.3%) were detected.

According to a pilot study that examined 192 children aged 1-18 years in two refugee centres in northern Greece, 7.8% of the children were under-
weight, 4.6% were wasted, 7.3% stunted and 13% suffered from at least one form of malnutrition. Girls were more affected by malnutrition compared with boys. Furthermore, as regards to adolescents, 21.7% of the girls and 10% of the boys experienced at least one form of malnutrition (Grammatikopoulou et al., 2019).

**Vitamin A, D and B12 Deficiency**

Vitamin A and D deficiencies are common in immigrants and refugees, reaching up to 80% (Benson et al., 2007; Lips & de Jongh, 2018; Chaudhry et al., 2018; Seal et al., 2005; Beukeboom & Arya, 2018). Furthermore, severe vitamin D deficiency (serum 25-hydroxyvitamin D < 25 nmol/l) may occur in up to half of children and adults of non-western origin. Various factors contribute to the development of vitamin D deficiency, including insufficient sunshine exposure, more pigmented skin, wearing skin-covering clothes due to religious or cultural reasons, etc. (Benson et al., 2007; Lips & de Jongh, 2018; Chaudhry et al., 2018).

Vitamin B12 deficiency is also common among refugees. This deficiency is mainly attributed to low intake of animal-source foods and intestinal parasites, such as Helicobacter pylori (Benson et al., 2015; Beukeboom & Arya, 2018).

**Anaemia and Iron Deficiency**

Iron deficiency anemia occurs more often in women and children migrants (Redditt et al., 2015; Beukeboom & Arya, 2018). Depending on the migrants’ country of origin, rates of anemia have been reported to range from 12% to 55% (Tanaka et al., 2018; Pavlopoulou et al., 2017; McCarthy et al., 2013; Raman et al., 2009; Hayes et al., 1998). According to a recent study in a migrant outpatient clinic, 13.7% of all immigrant and refugee children (15.2% of immigrant and 12.3% of refugee children) presented with anemia. Furthermore, low ferritin levels were observed in 17.3% of the overall sample (Pavlopoulou et al., 2017).

**Obesity**

Migrants are highly likely to arrive in new countries with a healthy body weight. As a result of socio-economic factors and stress, as well as exposure to different diet patterns, migrants and refugees appear to have a greater risk of obesity compared to host populations, approximately 10 to 15 years after migration (WHO, 2018; Murphy et al., 2017). Early prevention and education concerning healthy nutrition is important in order to halt the spread of the obesity epidemic among migrants and refugees. Activities to promote healthy weight in migrant/refugee populations should be a routine service at the community health care level.

**Physical Activity**

Physical activity levels among migrants/refugee are lower than those of the non-immigrant populations and they are associated with increased health inequalities (Ainsworth, 2000; Sternfeld, Sternfeld, Ainsworth & Quesenberry, 1999; Gadd et al., 2005; Wieland et al., 2013; Fischbacher, Hunt & Alexander 2004; Williams, Stamatakis, Chandola & Hamer, 2011).

Perceived barriers among migrants and refugees include cultural differences, lack of familiarity and lack of comfort in engaging in physical activities, as well not believing in the health benefits of physical activity (Koshoedo, Simkha & van Teijlingen, 2015; Koshoedo, Paul-Ebhoimhen, Jepson & Watson, 2015; Devlin et al., 2012; Wieland et al., 2013).

**Important steps/ requirements for the Health care sector**

Recently, the WHO put forward 8 guiding principles for framing migrant health promotion (WHO, 2017). These include:

- The right to the enjoyment of the highest attainable standard of physical and mental health.

3. This right is enshrined in many international agreements and treaties e.g. The International Covenant on Economic, Social and Cultural Rights (1966); as declared in the preamble to the Constitution of the World Health Organization. Also, the International Covenant on Economic, Social and Cultural Rights, Article 2.2 and Article12, recognizes the right of everyone to the enjoyment of the highest attainable standard of physical and mental health without discrimination of any kind as to race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status; status resolutions; resolutions WHA61.17 (2008) and WHA70.15 on promoting the health of refugees and migrants. Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143) provide that migrant workers should enjoy equal Occupational Safety and Health rights as any other worker. See Framework of priorities and guiding principles to promote the health of refugees and migrants http://www.who.int/migrants/about/framework_refugees-migrants.pdf
Equality and non-discrimination.
Equitable access to health services.
People centred, refugee and migrant/ gender sensitive health systems.
Non-restrictive health practices based on health conditions.
Whole-of-government and whole-of-society approaches.
Participation and social inclusion of refugees and migrants.
Partnership and cooperation.

A recent rapid review of the health promotion literature (Laverack, 2018) has analyzed different strategies that have been used with migrants. These may be divided into:

a) general non-specific strategies and interventions based on universal health promotion principles, and
b) tailor-made interventions for specific migrant groups and for addressing specific health and prevention issues.

Complementary strategies include health literacy, peer education and community health education models, in which members of the migrant community now having established their roots in the host country may play a key role acting as linguistic interpreters and cultural mediators. In general, it was considered that tailor-made interventions, especially those engaging with the community-based organizations using culturally appropriate messages and methods were likely to be more effective than non-specific programs.

WHO defines oral health as “a state of being free from chronic mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual’s capacity in biting, chewing, smiling, speaking, and psychosocial wellbeing” (WHO, 2003).

The Mig-HealthCare survey has shown that the most frequent chronic health problem migrants/refugees face is caries (36.2%) whereas the most frequent health issues found important by migrants is teeth problems (51%).

In addition, various scientific studies have shown that dental problems comparatively present high prevalence rates among migrants, particularly migrant children. Generally, little is known about the dental health of migrants as well as about their oral health behaviour, particularly in the adult population.

Studies conducted up to date show that:

- the prevalence of caries among children born to migrants is higher compared with children who did not have a migrant background
- migrant children are more often affected by gingivitis and less likely to seek orthodontic treatment or counselling compared to other children of the same age group
- there is a strong link between migrant background and the usage of regular dental check-ups even regardless of socioeconomic and demographic status as well as place of residence and health insurance. It has been shown, that particularly younger migrants (between 18 and 29 years) make less use of preventive dental care and regular check-ups than non-migrants (Erdsiek, Dorothee Waury & Patrick Brzoska, 2017; Arabi, Reissmann et al., 2018).
Important steps/ requirements for the Health care sector

As migrants/refugees integrate into European host communities the need for oral and dental health care provision will increase and the pressure on dental care services across the EU will grow significantly.

In a survey among refugees and migrants conducted within the Mig-HealthCare project in 10 EU countries, 17.4% of migrants considered their dental condition as poor and 26.6% as fair. A total of 27.3% had visited a dentist during the last year, while 23.7% had never visited a dentist or a dentist’s clinic in their lives. Overall, 10.4% said they did not brush their teeth on a daily basis and 29.4% of the responding migrants did not know where to go in case they needed a dentist.

Data on the health status and use of oral care provision is still scarce, but it is clear, that specific vulnerable migrant groups, especially refugees/asylum seekers, have no or restricted legal access to full oral care provision. Lowering access barriers to the care system and the expansion of specific programs for prophylactic and intervention for the migration population are necessary for long-term improvements of oral health. Besides legal barriers, there are socioeconomic factors (unemployment and/or reduced income vs. high financial burden associated with dental care) limiting access for migrants to adequate oral care. It is crucial to implement effective monitoring tools to steer future targeted preventive programs.

It is recommended among migrants/refugees to:

› monitor oral health status to identify community healthcare problems
› diagnose and analyse oral health risks in the community
› inform and educate the target population through health education campaigns, targeted and cultural sensitive information material, media involvement, community groups, partnerships etc.
› advocate to promote policy and law changes and enforcement
› conduct trainings in community oral health, consider geographical allocation of professionals and monitor activities

In addition, WHO points out the importance of promoting healthy settings such as healthy cities, healthy workplaces and health promoting schools to build comprehensive supporting environments for promoting oral health among migrants and refugees.

Please access our toolbox for additional tools related to the management of oral/dental health issues among migrants and refugees on the following link: https://mighealthcare.eu/index.php?option=com_wizard&view=wizard&layout=toolboxfilter&catSelected=9&subCatSel=1&langSelected=&materialSel=0&targetSel=0&endSel=0
Non-Communicable Diseases and Chronic Conditions

Non-Communicable Diseases (NCDs) in newly arrived migrants and refugees are lower compared to the native population, although as duration of stay in the host country increases so does prevalence and incidence of NCDs (WHO, 2018).

On the contrary, refugees and migrants who already suffer from NCDs are more vulnerable to the stress caused by the migration journey and are more prone to disease complications, because of adverse conditions and inability to access suitable health care.

The International Red Cross estimates that people who live under crisis or emergency situations experience two to three times higher acute complications related to pre-existing health problems (IRC, 2018).

Specific NCDs of particular interest for this group include Diabetes, Obesity and Cancer.

According to the WHO, the refugee and migrant journey can increase symptoms or cause a life-threatening deterioration among those suffering from NCDs. Vulnerable people, such as older people and children, are mostly at risk.

Complications among migrants/refugees suffering from NCDs according to the WHO (2018) can be a result of:

- Physical injuries: factors such as secondary infections and poor control of glycaemia, compromise management of acute traumatic injuries;
- Forced displacement: loss of access to medication or devices, loss of prescriptions, lack of access to health care services leading to prolongation of disruption of treatment;
- Degradation of living conditions: loss of shelter, shortages of wa-

mig-HealthCare //
ter and regular food supplies and lack of income add to physical and psychological strain; interruption of care: due to destruction of health infrastructure, disruption of medical supplies and the absence of health care providers who have been killed, injured or are unable to return to work; and

- Interruption of power supplies or safe water, with life-threatening consequences, especially for people with end-stage renal failure who require dialysis.

As the prevalence of NCDs increases so will the healthcare related costs required to treat the adverse effects, expected to be more evident among vulnerable groups, such as migrants and refugees. Given the fact that NCDs are chronic, as life expectancy increases, the duration of related expenditures is projected to last for a substantial number of years, which in financial scarcity situations is an unbearable burden. Especially in the case of vulnerable groups, such costs can only be met by the state healthcare and insurance providers, whereas indeed there are more cost-effective ways of disease prevention which could levitate such high costs (EU Ageing Report 2015).

Important steps/requirements for the Health care sector

According to the WHO (2018), there are minimum standards of care for responding to the needs of refugees and migrants with NCDs. More specifically these include:

- Identifying individuals with NCDs to ensure continuing access to the treatment they were receiving before their travel.
- Ensuring treatment of people with acute, life-threatening exacerbation and complications of NCDs.
- When treatments for NCDs are not available, establish clear standard operating procedures for referral.
- Ensure that essential diagnostic equipment, core laboratory tests and medication for routine management of NCDs are available in the primary health care system. Medications that are on the local or WHO lists of essential medicines are appropriate.

The WHO also sets key indicators for service providers in terms of NCDs among migrants/refugees:

- All primary health care facilities have clear standard operating procedures for referral of patients with NCDs to secondary and tertiary care facilities.
- All primary health care facilities have the necessary medications to continue pre-emergency treatment of patients with NCDs, including for pain relief.

Please access our toolbox for additional tools related to the management of "NCDs" among migrants and refugees on the following link:

https://mighealthcare.eu/index.php?option=com_wizard&view=wizard&layout=toolboxfilter&catSelected=10&subCatSel=&langSelected=&materialSel=0&targetSel=0&endSel=0
The Mig-HealthCare Algorithm

Start

1. Why did you come here today?

   - LANGUAGE, CULTURE & COMMUNICATION ISSUES
     - Do you speak the Host Country Language?
       - No
         - The following message appears: "There is need for an interpreter/translator. You can access the tools of the category: Language & Communication". Go to the next question
       - Yes
         - Go to the next question

   - No
     - The following message appears: "Do you speak any other commonly known languages (e.g. English, French etc.)?" Go to the next question
   - Yes
     - Go to the next question

2. Is the patient's medical history available?
   - No
     - Do you have one of the following: Health card? Medical documents? Previous examinations/tests?
       - No
         - The following message appears: "It is very important to take the patient's medical history. You can access the tools of the category: Continuity of Information". Go to the next question
       - Yes
         - The following message appears: "Based on the available data from these documents complete the medical history. You can access the tools of the category: Continuity of Information". Go to the next question
   - Yes
     - Go to the next question

3. At least one answer is No
   - All answers are Yes
     - Go to the next question
     - The following message appears: "There is need for further action! You can access the tools of the category: Health Literacy". Go to the next question
     - Go to the next question
     - The following message appears: "Always consider that migrants / refugees come from different ethnic / cultural backgrounds. Please refer to the roadmap and toolbox for more information and help. You can access the tools of the category: Cultural Issues" Go to the next question
MENTAL HEALTH

The following questions are about how the patient feels and how things have been with him/her during the past 4 weeks. Please give the one answer that comes closest to the way they have been feeling.

- Have you been a very nervous person? 1 2 3 4 5 6
- Have you felt so down in the dumps that nothing could cheer you up? 1 2 3 4 5 6
- Have you felt calm and peaceful? 1 2 3 4 5 6
- Have you felt downhearted and blue? 1 2 3 4 5 6
- Have you been a happy person? 1 2 3 4 5 6

All of the time (1) Most of the time (2) A good bit of the time (3) Some of the time (4) A little of the time (5) None of the time (6)

52 > score

Go to the next question

52 < score

The following message appears: "There is need for a Mental Health Specialist". You can access the tools of the category: Mental Health. Go to the next question

VACCINATIONS

Do you have a vaccination card?

Yes

Go to the next question

No

Go to the next question

When was the last time you were vaccinated?

HEALTH PROMOTION

Do you smoke?

Yes

The following message appears: "Advise the patient to consider smoking cessation clinics within the National Healthcare System. You can access the tools of the category: Smoking." Go to the next question

No

Go to the next question

Do you drink alcohol?

Yes

The following message appears: "You can access the tools of the category: Alcohol. Go to the next question"

No

Go to the next question

BMI index (what is your weight, what is your height, BMI will be calculated automatically and a message will appear whether the patient is of normal weight, underweight, obese or overweight)
**NCDs & Chronic Conditions**

Do you have increased blood pressure?

- Yes
  - The following message appears: “Advice your patient to schedule further medical examinations! You can access the tools of the category: NCDs & Chronic conditions”. Go to the next question

- No
  - Go to the next question

Do you have high cholesterol levels?

- Yes
  - The following message appears: “Advice your patient to schedule further medical examinations! You can access the tools of the category: NCDs & Chronic conditions”. Go to the next question

- No
  - Go to the next question

Do you have heart issues?

- Yes
  - The following message appears: “Advice your patient to schedule further medical examinations! You can access the tools of the category: NCDs & Chronic conditions”. Go to the next question

- No
  - Go to the next question

**Maternal & Child Health**

Do you have diabetes?

- Yes
  - The following message appears: “Advice your patient to schedule further medical examinations! You can access the tools of the category: NCDs & Chronic conditions”. Go to the next question

- No
  - Go to the next question

Do you have any children?

- Yes
  - Go to the next question

- No
  - The following message appears: “You can access the tools of the category: Maternal and child health”. Go to the next question

Has your child/children been diagnosed with any condition?

- Yes
  - Go to the next question

- No/Non applicable
  - The following message appears: “Advice your patient to access pediatric services if needed. You can access the tools of the category: Maternal and child health”. Go to the next question

- No
  - Go to the next question
The full text references of the bibliography mentioned in each of the health issues covered in this document can be accessed from the following links:

› https://mighealthcare.eu/roadmapPDF/Language%20Culture%20Communication[1].pdf
› https://mighealthcare.eu/roadmapPDF/Mental%20Health[3].pdf
› https://mighealthcare.eu/roadmapPDF/Health%20Promotion[6].pdf
› https://mighealthcare.eu/roadmapPDF/Oral%20health-Dental%20care[7].pdf
› https://mighealthcare.eu/roadmapPDF/NCDs[8].pdf