Point-of-Care: health care needs of migrant and refugee

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- The number of migrants and refugees in Europe has increased dramatically in the past few years due to war, violence or prosecutions in their homeland
- Migration may affect physical, mental and social health

> 1 million arrivals to EUROPE 2015...

Main entry points to Greece, January 2018 and 2019

Known entry points to Greece

Lesbos, Chios, Samos, Leros, and Kos are the main entry points for migrants who arrived in Greece by sea and

Evros River on the North-West for those arriving by land
Migration flow in Greece

- Between January and March 2019, a total of 8,162 migrants and refugees were registered in Greece.
- They are the highest reported since 2016 when 151,452 migrants and refugees crossed the Aegean sea between Turkey and Greece.

http://migration.iom.int/reports/europe-%E2%80%94‐mixed‐migration‐flows‐europe‐quarterly‐overview‐january‐march‐2019?close=true

source: UNHCR

Reception centers of migrants/refugees in Greece

Current profile of newly arrived migrants/refugees
- Families
- Pregnant women
- Elderly
- People with chronic diseases
- Persons with special needs of all ages

Health problems of migrants/refugees at Points of care (PoCs)
- Migrants and refugees move throughout Europe, in different places and stages of their journey.
- Their main health needs are related to their reasons for flight and to their journey, aggravated by unhealthy living conditions in the reception centres.

Health problems of migrants/refugees on arrival
- Accidental injuries
- Drowning
- Frostbite
- Infectious diseases (Gastrointestinal and respiratory)
- Metabolic problems
- Dermatological conditions
- Mental illness
- Gynaecological and obstetric complications

On arrival, the most common health problems recorded at the hotspots may be related to problems in their country of origin (e.g. political crisis, war) and the journey...
Health status of newly arrived migrants

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Number</th>
<th>%</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobinuria</td>
<td>29</td>
<td>2.9</td>
<td>25</td>
<td>2.5</td>
</tr>
<tr>
<td>Hypertension</td>
<td>23</td>
<td>2.3</td>
<td>13</td>
<td>1.3</td>
</tr>
<tr>
<td>Epileptic encephalopathy</td>
<td>2</td>
<td>0.2</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Dermatological conditions</td>
<td>22</td>
<td>2.2</td>
<td>7</td>
<td>0.7</td>
</tr>
<tr>
<td>Allergic reactions or skin erythema</td>
<td>45</td>
<td>4.5</td>
<td>8</td>
<td>0.8</td>
</tr>
<tr>
<td>Psychiatric conditions</td>
<td>17</td>
<td>1.7</td>
<td>4</td>
<td>0.4</td>
</tr>
<tr>
<td>Mental problems</td>
<td>59</td>
<td>5.9</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>2</td>
<td>0.2</td>
<td>4</td>
<td>0.4</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>362</td>
<td>36.2</td>
<td>48</td>
<td>4.8</td>
</tr>
<tr>
<td>Diabetic</td>
<td>4</td>
<td>0.4</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Diabetic nephropathy</td>
<td>13</td>
<td>1.3</td>
<td>4</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>3,289</td>
<td>100</td>
<td>528</td>
<td>100</td>
</tr>
</tbody>
</table>


Overview of health problems in reception centers of migrants/refugees in 7 EU countries

- Most common health problems were caused by war or violence and accidents during the journey or by unhealthy living conditions in often-overcrowded reception centers.

Clinical findings
- Purplish-blue to black lesions on fingers on both hands. No evidence of infection.
- Physical examination revealed no other abnormality.

Diagnosis: Gangrene (dry) due to frostbite

Health problems of migrants/refugees during the early settlement

- Communicable diseases
  - Respiratory infections (50%)
  - Gastrointestinal
  - Skin infections (e.g. Scabies, Vector-borne diseases such as lice, flea- and mite-transmitted infections, due to suboptimal living conditions)
  - Vaccine-preventable diseases (measles, varicella, hepatitis A)
  - TB: risk depends on the TB incidence in their country of origin, living conditions and poor access to health services during migration.

Management
- Wound care
- Referral to Surgery outpatient department at the local hospital

# Case 1

42 year old woman from Afghanistan presents with severe black lesions on fingers. She arrived in Greece after a long trip from Afghanistan through Turkey. She had no history of pre-existing conditions.
# Case 2

A 5 year old girl refugee from Syria presents with nausea, vomiting, diarrhoea and abdominal pain at the refugee camp's local health facility (April 2016)

Clinical findings and laboratory investigations

- Jaundice, abdominal tenderness
- ↑ serum alanine aminotransferase (ALT and SGPT) and aspartate aminotransferase (AST or SGOT)
- anti-IgM for hepatitis A virus (HAV) were positive

Diagnosis: hepatitis A

Management and control measures

- 2016: cases were reported in 29 different locations: 16 hosting camps (149 cases), 10 hotels (23 cases) and three apartments (5 cases)
- 85% hospitalized
- All cases fully recovered


Outbreaks in PoCs in Greece

Hepatitis A
- 2016:187 cases, 2017:30 cases, 2018:83 cases
- Most of them from Syria and Afghanistan

Varicella
- 37 cases were reported in March and April 2016
- Most from Syria, Afghanistan and Iraq

Shigellosis
- 61 shigellosis cases from 2015–2016
- Most from Afghanistan

Management and control measures

- Vaccination of close contacts within 14 days after their last contact with the case
- Priority was given to vaccination of children aged 1–14 years; for contacts aged ≥15 years old or older, serological testing for anti-HAV IgG and consequent vaccination according to result was recommended
- Recommendations for the improvement of living conditions
- Hygiene measures inside accommodation camps and in reception and identification centers; brochures and posters with instructions on personal hygiene translated into Arabic, Urdu and Farsi


# Case 3

A 40 year old refugee from Afghanistan living in a reception centre in Greece, presents to the doctor with rash and itchiness, especially at night, for 1 week
Clinical findings

- Skin papular rash affecting the whole body in particular interdigital areas, wrist, elbow, axilla, genital areas, buttocks, waist and nipples
- Small burrows were also visible on the skin (serpiginous grayish-white or skin-colored lines)
- Skin sores (lesions complicated with infection) due to scratching (Staphylococcus aureus or beta-hemolytic streptococci)

Diagnosis: Scabies

Management and control measures

- Treatment of infested patient with topical medications (e.g. benzyl benzoate lotion), antihistamines
- Treatment of close personal contacts (prolonged skin-to-skin contact) at the same time
- Washing of all bedding, clothing, and towels in hot water and drying in a hot dryer, or sealed in a bag for 5-7 days
- Hanging quilts and blankets outside

Health problems of migrants/refugees during the early settlement

- NCDs (>50%)
  - Musculoskeletal problems
  - Gynecology/OB complaints
  - Chronic conditions (e.g. cardiovascular & cerebrovascular disease, diabetes, renal failure, anaemia)
- Psychological issues (Post-traumatic stress disorder, depression, panic attack)
- Maternal, newborn and child health issues
- Violence: Sexual and physical violence (women are at high risk)
- Drug and alcohol abuse
- Nutrition problems

# Case 4

22 year old lady, a refugee who recently arrived from Syria, married with a 6 month old baby, presents with palpitations of sudden onset, sweating, shaking, shortness of breath, hot flashes, dizziness, chest pain, tingling and fear of dying. No significant past medical history (a history of traumatic experiences during the war lost her brother and parents)
Clinical findings
- Anxiety
- Tachycardia
- Hyperventilation
- No other abnormality (cardiovascular or neurological) was found on physical examination

Diagnosis: Panic attack
... mental and psychosocial illness is a significant problem for newly arrived migrants in particular post-traumatic stress disorder!

E. Polysiou, et al. Mixed Migration Flows and Mental Health Patterns during the First Reception at the Greek-Turkish Borders. ICMH. Rome 2018

Management
- Reassurance/counselling
- Anxiolytics
- Observation
- Symptoms lasted for 15-20 minutes
- Referral to psychiatry outpatient of the local hospital and to a psychologist for regular follow up at the PoC’s clinic

Health problems of migrants/refugees during the early settlement
Migrants/refugees with chronic NCDs may be more vulnerable due to
- Suboptimal conditions during their movement and at reception centers
- Interruption of the continuity of chronic NCDs management due to displacement
- Acute exacerbation or complication of chronic conditions and life threatening deterioration (e.g. elderly people and children)


Barriers to access to health care of newly arrived migrants/refugees
- Bureaucratic barriers and structural problems
  (need for provision of information about the local healthcare system, regulations and procedures)


Barriers to access to health care of newly arrived migrants/refugees
- Legal frameworks regarding migration status of each person
- Lack of trust and lack of information, pressure to continue their trip
- Cultural and language problems (need for cultural competent interpreters)


Health regulations towards refugees vary among the EU countries and may influence a refugee’s access to health care services
- There are different regulations for the care of different migrant groups (e.g. undocumented migrants and unaccompanied minors), in most EU countries, undocumented migrants only have access to emergency health care

Implementation of measures for the health needs of migrants/refugees at PoCs

- Provision of Primary care services
- Triage for assessment and prioritization of patients based on acute illness (physical and mental)
- Public Health measures
  - Epidemiological & Syndromic surveillance
  - Vaccinations
  - Screening for communicable diseases
  - Health Education & Promotion (NCDS, screening)
- Psychosocial support
- Dental services

 Syndromic surveillance at Points of Care for refugees/migrants: 16/5/2016-28/4/2019

<table>
<thead>
<tr>
<th>Syndrome/condition</th>
<th>Proportional morbidity (%)</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory infection with fever</td>
<td>3.24</td>
<td>18.4</td>
</tr>
<tr>
<td>Gastrointestinal disease</td>
<td>1.22</td>
<td>4.74</td>
</tr>
<tr>
<td>Malaria</td>
<td>0.00</td>
<td>0.23</td>
</tr>
<tr>
<td>Typhoid</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Meningitis</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Other causes of acute illness</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Neuronal manifestations of acute illness</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Hematological manifestations of acute illness</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Severe shock</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Death at common antity</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>5.53</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Department of epidemiological surveillance and intervention, HCDCP

Primary care services

PHC services are provided through a multidisciplinary team (General Practitioner (GP), nurse, midwife and cultural mediator...)

- Management of acute and chronic conditions
- Immunization
- Collaboration with other health care institutions (e.g. hospitals)
- Psychologists and social workers
- Health promotion

Syndromic surveillance at Points of Care for refugees/migrants: 16/5/2016-28/4/2019

<table>
<thead>
<tr>
<th>Syndromes with the greatest proportional morbidity (n: 11)</th>
<th>Syndromes with low proportional morbidity (n: 22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory infections</td>
<td>Sporadic cases of suspected TB</td>
</tr>
<tr>
<td>Gastroventitis</td>
<td>Acute jaundice: 85% hepatitis A</td>
</tr>
<tr>
<td>Scabies</td>
<td>Meningitis cases: not confirmed as such, with the exception of two cases of viral meningitis</td>
</tr>
<tr>
<td>Rash with fever (95% chickenpox, mostly aged&lt;4.5 years)</td>
<td>Reported cases of “neurological manifestations of acute onset”, “sepsis/shock” and “deaths of unknown etiology”: not attributed to infectious etiology</td>
</tr>
<tr>
<td>Meningitis cases</td>
<td>Malaria cases: newly arrived, imported cases (2015-2018: 58 cases -22% of all migrant cases</td>
</tr>
</tbody>
</table>

Source: Department of epidemiological surveillance and intervention, HCDCP

Syndromic surveillance at PoCs for migrants/refugees

- Operates in 25-50 PoCs from May 2016 with daily epidemiological data for 14 selected syndromes/health conditions that are important from a public health point of view

No major event, no serious diseases of public health concern

Syndromic surveillance at PoCs for migrants/refugees

There is no evidence suggesting that migrants and refugees increase the risk of infectious disease epidemics in the host countries. However, many newly arrived migrants in Europe are vulnerable to infection, and thus prevention and monitoring of infectious diseases among newly arrived migrants is essential to identify and address their health needs

**What vaccinations are administered at reception centers?**

**For migrants/refugees of PoCs**

**Against 10 infectious diseases**

- MMR: 12m < 15 y: 1 dose MMR
- Tetanus-Diphtheria-Pertussis-Poliovirus-Haemophilus influenzae b- Hepatitis B: 2 doses: DTP-IPV or DTP-IPV-Hib, or DTP-IPV-Hib (75%) - Hep B (79%). Children >4 yrs teenagers: DTaP or Td-IPV
- Pneumococcal vaccine: 2m-5 y
- In case of outbreaks: Meningococcal vaccine A, C, W135, Y, Varicella and Hepatitis A vaccines and influenza vaccine (during influenza season) for ≥ 6m


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**What vaccinations are administered at reception centers?**

**For personnel of PoCs and those in close contact with migrants/refugees (HCW, security guards, food handlers, teachers, cleaners...) it is recommended:**

- To be up to date with the National Vaccination Program
- MMR: 2 doses for those born > 1970
- Varicella vaccine: 2 doses
- Hepatitis A vaccine


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**Screening of Newly Arrived Migrants/Refugees**

- Screening of migrants and refugees for certain diseases is not obligatory (WHO) (e.g. TB, Hepatitis B and C, HIV...)
- Screening programs of migrants and refugees upon arrival in the EU vary among EU countries (TB is the most commonly screened disease)


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**Screening of Newly Arrived Migrants/Refugees**

- Screening for certain diseases is part of the prevention and control strategy for some EU countries (e.g. HIV, viral hepatitis, TB...)
- In Greece, screening for TB is implemented and "ad hoc" screening for other diseases

"Consider epidemiology of disease in the country of origin"


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**What are the challenges?**

**Migrants and refugees**

- Registration and procession of asylum claims difficulties
- Inaccurate demographic details & bureaucratic barriers
- Challenges in healthcare system (financial crisis and poor resources!)
- Lack of intersectoral coordination
- Interruption of continuity of care
- Barriers in accessing health care
- Lack of communication services (i.e. cultural mediators, interpreters)


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**What are the challenges?**

**Health providers**

- Random assignment (lack of preparation) and lack of continuity of care provision
- Lack of cultural competence and skills for working in cross-cultural consultations
  - Healthcare providers may be incapable of addressing migrants’ illnesses in a holistic fashion, focusing mainly on ‘physical’ illness (e.g. stress or other mental health disorders may be left unresolved)
  - gender preferences

What are the challenges?

Health providers

- Language problems
  - Adaptation of medical histories to less complex and avoiding delving into the traumatic experiences of migrants in their countries of origin
- Feeling of "ineffectiveness" regarding their ability to bring changes to the system to improve migrant healthcare
  - (poor resources, prescribing medication, referral to hospitals...) and mistrust by immigrant patients
- Heavy workloads


Conclusions-Recommendations

Migrant and refugee crisis in Greece/Europe has reached a critical point...

- The number of migrants/refugees in Greece and Europe has increased dramatically in the last years with socioeconomic and health-related challenges for migrants/refugees and the host countries
- Their most common health problems are common Primary Care problems
- Migrants do not pose a significant health threat to the citizens of the EU
- Access of care varies among migrants/refugees (different rights)


Conclusions-Recommendations

- There is a need at EU level to act and to move from emergency response to an integrated and individualized health care provided by compassionate and cultural competent health care providers with actions at policy level
- Provision of a systematic health-reception, with intersectoral collaboration based on a holistic approach by a multidisciplinary team, will not only benefit migrants and refugees but also will protect the public health of host countries