FWD among refugees and migrants, 2015-2016, Greece

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Presentation’s Outline

• Basic terms - review
• The Syrian crisis
• Arrivals of refugees / migrants to Europe 2015-2016
• Current situation in Greece – Main challenges
• FWD epidemiology in refugees and migrant population
• Surveillance of FWD among refugees and immigrant population in Greece
• Summary of epidemiological data for 2015-2016, investigation and response
Useful definitions – Refugees

Refugees

• Defined and protected in international law
• Persons fleeing armed conflict or persecution for whom denial of asylum has potentially deadly consequences
• Access to assistance from countries, UNHCR, and other organizations
• Should not be expelled or returned to situations where their life and freedom would be under threat
• Countries have responsibility towards anyone seeking asylum on their territories or at their borders
• Countries should ensure that basic human rights are respected, refugees live in dignity and safety and should help them find a longer-term solution
Useful definitions – immigrants

Migrants

• Choose to move to improve their lives by finding work, for education, family reunion, or other reasons
• They face no such impediment to return
• Countries deal with migrants under their own immigration laws and processes
Nationalities among arrivals to Europe, 2015-2016

Vast majority come from the world’s top 10-refugee producing countries (UNHCR data)
The Syrian crisis (last update 01/03/16)

SYRIAN REFUGEE CRISIS

Families Fleeing Violence
There are more than 4.7 million Syrian refugees in neighboring countries. Nearly one million have applied for asylum in the safety of Europe. More than 13.5 million people are still in need of assistance inside Syria.

1 in 5 people is a Syrian refugee

LEBANON 1,069,111

1 in 13 people is a Syrian refugee

JORDAN 637,859

EGYPT 118,512

TURKEY 2,620,553

SYRIA 6.6 million people internally displaced

IRAQ 245,543

As of February 24, 2016
Sources: http://data.unhcr.org/syrianrefugees/regional.php
UNOCHA.org/syria
The Syrian crisis (last update 01/03/16) II
Data on refugees and immigrants, Europe, 2015 - 2016

- 1,015,078 refugees and immigrants arrived in Europe by sea in 2015 and 178,814 in 2016 so far.
Refugees and migrants, Greece situation, 2015-2016

- In 2015, Greece received the highest number with an estimated 856,723 arrivals
- Refugees usually left the country within few days of their arrival
- Situation changed after closing of the borders in February 2016
- > 50,000 refugees and immigrants are hosted in Greece
- Need for different approach – enhanced surveillance and response
New arrivals in 2016

Increasing numbers of refugees and migrants take their chances aboard unseaworthy boats and dinghies in a desperate bid to reach Europe. The vast majority of those attempting this dangerous crossing are in need of international protection, fleeing war, violence and persecution in their country of origin. Every year these movements continue to exact a devastating toll on human life.

Top-10 nationalities of Mediterranean sea arrivals

<table>
<thead>
<tr>
<th>Nationality</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syrian Arab Republic</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>28%</td>
<td>27%</td>
</tr>
<tr>
<td>Iraq</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>Pakistan</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Iran</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Others</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

153,468 arrivals by sea in 2016
856,723 arrivals by sea in 2015

90% of arrivals come from the world’s top 10 refugee-producing countries.

Comparison of monthly Mediterranean sea arrivals

<table>
<thead>
<tr>
<th>Month</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>200,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Feb</td>
<td>200,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Mar</td>
<td>200,000</td>
<td>200,000</td>
</tr>
</tbody>
</table>
Current situation, Greece, 2016
(15 April)

• 53,666 refugees and immigrants are hosted in Greece; 2,048 in Central Greece, 7,216 in East Aegean, 29,269 in North Greece, 338 in South Greece and 14,795 in Attica

• Most of the refugees at host centers

• 10,392 and 3,770 at Idomeni and Pireus port, respectively

• Nationalities: Syria (49%), Afghanistan (26%), Iraq (16%), Pakistan (3%), Iran (3%), others (3%)

38% children, 21% women and 41% men
Site locations in Greece
Infectious diseases among refugees and immigrants

• “Refugees are vulnerable to infectious diseases because of the specific circumstances under which they live and therefore they require special attention”, ECDC

• Specific circumstances: mobility, low immune response

• Not a new problem, new in Europe
Factors contributing to the occurrence of FWD

- Susceptible population and low immunity
- Origin from countries that healthcare has been interrupted (destruction of facilities, lack of medical staff, access to medication, immunization programs interrupted)
- Overcrowding at host centers – capacity is exceeded
- Improvised camps of people refusing to stay at host centers
- Poor personal hygiene
- Lack of access to safe food and water
- Lack of access at facilities (bathrooms, hot water, soap)
- Endemicity in countries of origin, and at intermediate stops before entering the country (HAV, shigellosis, cholera)
FWD priorities – Risk assessment

Risk assessment conducted by the Hellenic Centre for Disease Control and Prevention

• HAV
• Shigellosis
• Cholera (upon arrival)
• Clusters / outbreaks (two or more cases epidemiologically linked)
Surveillance of FWD among refugees and migrants

• Mandatory notification system
  – Cases reported from hospitals / NGOs
  – Case-based data, if case is a refugee it is noted
  – Salmonellosis, Shigellosis, Listeriosis, VTEC infection
  – Notification of clusters of FWD cases / gastroenteritis

• Syndromic Surveillance System
  – Specially designed for refugees’ population
Syndromic surveillance system

• 14 different syndromes
  – Gastroenteritis (without blood)
  – Bloody diarrhoea
  – Jaundice with acute onset
• Line-listing of gastroenteritis cases
• Daily notification and statistical analysis – alerts
Definitions

[2] Gastroenteritis without blood in the stool
At least one of the following:
- Watery diarrhea (at least 3 loose stools per day)
- Vomiting
OR Clinical diagnosis of acute gastroenteritis WITHOUT blood in the stool

[3] Bloody diarrhoea
All of the following:
- Diarrhoea (at least 3 loose stools per day)
- Visible blood in the stool
AND at least one of the following:
- Mucus or purulent material in the stool
- Abdominal pain
OR Clinical suspicion of acute dysentery

[9] Jaundice of acute onset
- Sudden onset jaundice or sub-jaundice
AND at least one of the following:
- Fever (≥38.0°C directly measured or reported by the patient)
- Malaise
- Hepatomegaly, with or without rash (excluding pre-existing chronic or alcoholic liver disease)
OR Clinical suspicion of acute hepatitis
2015 data

• 16 shigellosis cases were reported among refugees in one transit center
• Additional 3 sporadic shigellosis cases
• 15 sporadic HAV cases
• 1 HAV case epidemiologically linked with a case of a Greek employee of the Port Authorities
• No major outbreaks among refugees / migrants
Shigellosis, refugees population, 2015

• 16 cases from August to October 2015 at the only transit center -at the time- in Athens
• First identified case developed symptoms on 20/08/2015 and last on 7/10/2015
• All identified cases were children (mean age: 4.7 years, SD: 3.5).
• 13 cases from Afghanistan, 1 from Iraq, 1 from Iran, 1 unknown
• No cases were recorded among Syrians
Cases of shigellosis, by date of symptoms onset and country of origin, Greece, August - October 2015 (n=16)

Abbreviations: AF: Afghanistan, IQ: Iraq, IR: Iran, UN: unknown
Results of case finding

- Family members or other people travelling with cases did not report symptoms and no family clusters were identified.
- An active case finding among people staying in containers close to the cases was conducted, but no cases were identified.
- No reported cases among staff, members of NGOs or other people working or visiting the center.
- No secondary community cases related to the refugees.
- All cases had arrived in Greece at different dates from Turkey.
Limitations - challenges

• Short time in Greece (one or two days on average) – difficult to follow up cases
• Lack of interpreters – not a priority at that point
• Denial of symptoms by adults may have been to avoid a probable delay of their departure
• Refusal to stay at hospital or get tested
Microbiological investigation

• Isolates were sent to the National Reference Laboratory
• *S. flexneri* (n=8) and *S. sonnei* (n=8) were identified, distributed in various serotypes
• Tested isolates (n=13) were multi-drug resistant; 7 ESBL-positive isolates
• Variety of species, serotypes and PFGE patterns indicate neither a common source of shigellosis among refugees nor a person-to-person transmission
Control measures

• Environmental investigation and collection of water and food samples
  – All samples found negative for *Shigella* spp. and other enteropathogens.
• Hygiene rules for drinking water, food preparation and waste disposal were ensured.
• Cases received antibiotic treatment (azithromycin) and was recommended future cases with bloody diarrhoea to be treated similarly
• Family members were advised on hygiene measures, the need for thorough hand washing with soap and water, the use of antiseptic solution
• Brochures and posters on personal hygiene rules distributed
• Staff and volunteers were made aware of the disease and the measures
• Enhanced surveillance and laboratory investigation of probable cases the following months (no new cases identified after 7 October)
Shigellosis among refugees in other countries, 2015

- Several other European countries reported shigellosis cases among refugees
- ECDC conducted a “Rapid Risk Assessment for Shigellosis among refugees in the EU”
- The need of timely notification of cases within EU/EEA was highlighted
2016 data

- Sporadic gastroenteritis cases
- 12 cases of HAV
HAV cases, 2016 (last update 15 April)

• 10 cases (1 in Jan, 1 in Febr, 6 in March, 2 in Apr)
• 2 asymptomatic (testing of close contacts)
• 9 from Syria, 3 from Afganistan
• At different spots
  – Lesvos island (1)
  – Elliniko camp, Attica (3)
  – Idomeni, Northern Greece (1)
  – Pireus at different ports (5)
  – Salonica (1)
  – Shisto camp, Attica (1)
Response

• Response protocol
• Hygiene measures
• Advice
• Vaccination of contacts – challenges
• Vaccination of the whole childhood population (under discussion)
Risk assessment, HAV

- Small number of reported cases
- Geographically scattered
- No severe cases
- Adult population from endemic countries probably immune due to prior infection
- Children in Greece are vaccinated against HAV (national immunisation program) and older ages probably immune due to prior infection

However
- Probable asymptomatic cases among children
- Poor hygiene
- Unvaccinated population
- The Greek adult population not vaccinated

We cannot exclude further transmission of the disease among refugees or transmission to volunteers and personnel of the centers and the general adult population in Greece
Current priorities

• Enhance surveillance especially at improvised camps
  – Syndromic surveillance system
• Co-ordinate response
  – Preparation of response protocols
  – Sensitisation of all possible stakeholders
  – Finding the resources (human and non-human) necessary for outbreak investigation and response
Overall

- The conditions are in favor of FWD and FWD outbreaks occurrence in the population of refugees and migrants
- In 2015 and 2016 so far, no major incident
- High probability to have an outbreak during summer
- Enhancement of surveillance and response plans are needed
References I


Thank you!

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