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Child Refugees in Europe and Infectious Diseases: Threat or Threatened?

Nikolaos Spernovasilis,[1,*] Georgios Siakallis,[2] Sotirios Tsiodras,[2] and Garyphallia Poulakou[2]

[1]Department of Internal Medicine, University Hospital of Heraklion, Heraklion, Greece
[2]4th Department of Internal Medicine and Infectious Diseases Unit, School of Medicine, Athens National and Kapodistrian University, Attikon University General Hospital, Athens, Greece

[*]*Corresponding author*: Nikolaos Spernovasilis, Voutes, P. O. Box 1352, 71110, Crete, Greece. Tel/Fax: +98-2810392359, E-mail: nikspe@hotmail.com

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Abstract

Concerns about emerging and re-emerging diseases in migrants and refugees have been raised due to high influx in European Union/European economic area in the past couple of years. In spite of the common perception of an association between migration and importation of infectious diseases, the World Health Organization stated that there is no systematic association. In this communication, the authors pronounce that the most important health issue facing child migrants and refugees is increased vulnerability to infectious diseases, and not the importation of infectious diseases. This vulnerability is a result of conditions under the refugees move and live when they arrive at their host countries, such as poor living conditions, overcrowding, suboptimal hygiene, malnutrition, and limited access to vaccination and health services. A health-related issue that is closely linked with social or economic disadvantage is termed health disparity. Health disparities negatively effect refugees, who have systematically experienced greater social or economic obstacles in health. It is important for migrant and refugee children to benefit from the same level of protection as indigenous populations with regards to infectious diseases. Equitable access to vaccination is of prime importance and health professionals, should approach children and adolescents, who are refugees or migrants, not only with the aim of providing access to effective treatments, yet, they should also take into consideration cultural and social aspects and aim to build strategies for better living conditions, screening, and vaccination.

1. Background

Persecution, conflict, and poverty are forcing many people to cross the Mediterranean sea, risking their lives to reach Europe. The United Nations High Commissioner for Refugees (UNHCR) reported, in 2016, that 362,376 people crossed the Mediterranean sea between January and December, including 173,450 in Greece, 181,436 in Italy, and 7,490 in Spain. The majority of refugees arrived from Syria (23%), with children comprising nearly 30% of the total refugee population. An additional greater than one million refugees and migrants had arrived to the Mediterranean region on boats, during year 2015 (1).

2. Arguments

The European Center for Disease Prevention and Control (ECDC) stated that the risk of infectious disease outbreaks for European Union/European Economic Area (EU/EEA) countries, as a consequence of the current influx of migrants and refugees, is extremely low and they do not represent a significant risk for EU/EEA populations (2). Therefore, the phenomenon of "globalization" of infectious diseases is more likely to be attributed to the increased international travel mobility due to business, tourism, visiting friends and relatives, pilgrimage, medical tourism, and voluntary humanitarian and healthcare work, than to migration (3).

Despite the common perception and concerns about a link between high influx migration in EU/EEA in the past couple of years and the importation of infectious diseases, the World Health Organization states that there is no systematic association between the two (4, 5). Evidence shows that there are differences in the prevalence of infectious diseases between minority groups and native populations in EU countries, indicating the presence of health disparities or inequalities (6, 7). Poverty and other related social determinants, together with unequal access to health services in host countries, increase vulnerability to infections and decrease the opportunities for diagnosis and treatment (8). Since 2006, it was concluded in a publication that the importation of infectious diseases is not the most important health issue facing migrants and refugees, yet, instead, it is their increased vulnerability to infectious diseases, which warrants attention (9), especially in children and adolescents. Figure 1 summarizes factors affecting optimal health conditions for child refugees. This clearly suggests that the most important determinants of infectious diseases in refugee populations are not necessarily population movements, but rather the conditions under which

refugees move and live in transit and the destination countries (10).

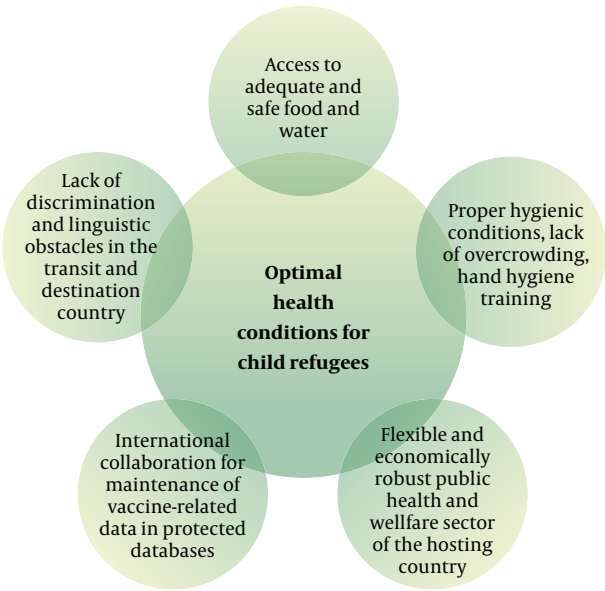

Figure 1. Factors Affecting Optimal Health Conditions for Child Refugees

The report of the Special Programme for Research and Training in Tropical Diseases describes infectious diseases as "a proxy for poverty and disadvantage", arguing that poverty contributes to conditions that cause infectious diseases and subsequently prevent access to health care. These reports and studies strengthen the general understanding that diarrhea, influenza, tuberculosis, and malaria are largely correlated with poverty (8, 11, 12).

Unfortunately, this extraordinary influx of refugees coincides with a general European recession, with particular focus in Greek economy, reaching disastrous dimensions in several components of public services. Gross domestic product in Greece has decreased by 25% since 2010 and austerity measures have significantly affected the public health and welfare sectors (13-15). The UNHCR has reported occasions where refugees and migrants in Greece had been staying in crowded camps with suboptimal conditions: tents placed too tightly together, poor air circulation, limited sanitary facilities, and insufficient electricity and heating/cooling capacity (16).

Poor living conditions, suboptimal hygiene, and destitution during migration make vulnerable individuals, especially children, prone to respiratory infections and gastrointestinal illnesses. Poor hygienic conditions could also lead to skin and soft tissue infections. A further contributor to dissemination of contagious diseases is their restless need for socializing and games involving outdoor contact. The ECDC in 2015 reported that there is limited information on the health situation of refugees currently in Europe. The few reports available from the International Organization for Migration (IOM) and some non-governmental organizations have mentioned respiratory diseases, joint pain, gastrointestinal infections, exhaustion, and dehydration in the transit centers of the Former Yugoslav Republic of Macedonia (FYROM), Serbia, Croatia, and Slovenia (17). The EU Member States and other institutions have reported several occurrences or suspicions of communicable disease outbreaks associated with poor living conditions and overcrowding in refugee camps, including hepatitis, cholera, scabies, cutaneous diphtheria, malaria, leishmaniasis, schistosomiasis, typhoid fever, tuberculosis, influenza, meningococcal disease, measles, and varicella (2, 17, 18).

Refugee and migrant children commonly experience chronic food shortages in the country of origin, during traveling, or after arriving at the host country, which can lead to micronutrient deficiencies and malnutrition (19). Malnutrition during childhood has been associated with increased risk of respiratory and gastrointestinal infections (20, 21). Furthermore, possible lower coverage with preventive interventions (lack of vaccination) makes this population even more vulnerable. In addition, once they become ill, they are less likely to have access to health services and the quality of these services is likely to be lower, with less or delayed access to life-saving treatments (22-24).

It is important that migrant and refugee children should benefit from the same level of protection as indigenous populations with regards to infectious diseases, e.g. safe housing, sanitation, clean water and food, screening for transmitted diseases as well as routine vaccinations (4). A recent systematic review highlighted that migrants and refugees have lower immunization rates compared to European-born individuals. This may be attributed to low vaccination coverage in the country of origin, being accentuated by several other adverse conditions: (i) migrants and refugees are used to move around the continent, and many vaccines require multiple doses at regular times; (ii) medical information including immunization status is often lacking; (iii) hosting countries may face economic constraints impeding extension of standard vaccinations to non-indigenous populations; (iv) migrants often refuse registration with medical authorities for fear of legal consequences; and (v) the lack of coordination among public health authorities of neighbouring countries may determine either duplications or lack of vaccine administration (25). Equitable access to vaccination is of prime importance and is one of the objectives of the European Vaccine Action Plan during years 2015 to 2020 (26). Many countries, such as those receiving large influxes of refugees, must in-

corporate refugees and migrants in their routine vaccination programmes to ensure equity and prevention.

3. Epilogue

Martin Seychell, Deputy Director-General of the Commission's Directorate-General for Health and Food Safety (DG SANTE), stressed that measures to protect migrants' and refugees' health are being taken "not out of unfounded fears that they might spread infectious diseases". He also pointed out: "Their health is at risk, not the health of EU citizens" (27). Therefore, the state and, more importantly, health professionals, should approach children and adolescents who are refugees or migrants, not only with the aim of providing access to effective treatments, but they should also take into consideration cultural and social aspects and aim to build strategies for better living conditions, screening, and vaccination.

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Footnote

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