Refugees and Health Care

Authors’ foreword

Truth is “the first casualty of war” [1]. Many refugees come from war zones, and there is little independent and even less empirical research into the emerging refugee situation in Europe. The authors strongly feel that available data should be presented without bias so that readers may make their own judgment.

First and foremost, the authors would like to applaud the countless volunteers including health professionals providing assistance to refugees across Europe and beyond. Many are going above and beyond the call of their professional duty to provide healthcare to refugees. The main purpose of this article is to describe the current refugee crisis. However, those providing this valuable assistance should be recognized.

Introduction

Each and every day, many individuals leave their home countries, where instability, repression, terrorism, forced labor, poverty and civil wars pose a threat to their lives and their families. Current instability in parts of the Middle East, Northern and Sub-Saharan Africa is driving the biggest movement of refugees across Europe since the Balkan wars in the 1990s [2, 3, 4]. Under the UN 1951 Convention and Protocol Relating to the Status of Refugees, a refugee is defined as an individual who “...owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country” [5]. Refugee and asylum seeker are two distinct legally defined terms often used as synonyms in public and varying between jurisdictions [6]. This article focuses exclusively on health care to refugees. The main purpose of this article is to describe the current refugee crisis. However, those providing this valuable assistance should be recognized.

Health and Asylum Seekers in Europe

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Turkey has an open door policy granting “temporary protection status” to every Syrian fleeing the conflict. Currently, Turkey hosts the largest number of refugees in the world, with around 2 million people, while Lebanon has the highest quota of refugees per inhabitant [7, 8]. According to UN High Commission for Refugees (UNHCR), it is estimated that Lebanon will have more than 1.8 million refugees and asylum seekers by the end of 2015 [9]. This condition has become a severe economic challenge for these countries’ economies. Approximately 260,000 refugees are located in refugee camps, while the remaining live freely in the cities [10]. The plight of children displaced by the Syrian conflict is particularly dire; Malta and Italy alone have received 10,000 separated or unaccompanied children this year [11].

Refugees and migrants typically use one of seven routes to reach Europe [7]:
- Western African
- Black Sea
- Eastern borders
- Western Mediterranean
- Central Mediterranean
- Eastern Mediterranean
- Western Balkan

In 2015, the Central Mediterranean, Eastern Mediterranean and Western Balkan route are most commonly used. Land bor-
Refugees within the Western Balkan region were the main entry points for refugees with the Hungarian-Serbian border being the most frequently crossed border in the region. Migrants entering Europe through this route include Western Balkan nationals and Syrians, followed by Afghans, Iraqis and Pakistanis [12]. Another highly popular route is through Turkey, over the Eastern Aegean Sea to the Greek islands. Refugees from Syria, Afghanistan, Iraq, Pakistan and Palestine, amongst others, often use this route. They may arrive in Turkey by land or ferry and continue on their way to Greece on cargo ships or inflatable boats [7]. The number of asylum seekers arriving in Greece each day typically reaches around 5000, with peaks of up to 10,000 [8].
Crossing the desert

For Sub-Saharan African nationals, the Central Mediterranean route is a primary point of entry into Europe. Little data are available describing events in the Saharan desert. The United Nations Office on Drugs and Crime (UNDOC) reports “only” 1691 confirmed deaths in the desert; however, it has been suggested that these numbers significantly underestimate the number of those killed with actual numbers at least three times higher [13].

Refugees are not only at risk due to heat stroke, thirst or starvation, but also face other dangers. According to UNDOC, many die in traffic accidents, overcrowded vehicles or by simply falling off of a vehicle and being left in the desert [13]. There are even more shocking reports of abuse, torture and other crimes against refugees. Until 2013, when the Egyptian Government reinstated the rule of law in the Sinai [14], many refugees became victims of rape, torture – or even homicide.

Physicians for Human Rights-Israel report that 59% of asylum seekers treated at their open clinic report being chained and/or locked up with 52% also reporting physical abuse [15]. A CNN crew visiting the Sinai reported that the morgue was packed with dead corpses daily [16] with refugees being abducted and tortured until their families paid a ransom. However, it is hard to verify this information. In a 2013 report, Reisen et al. that there have been an estimated 25,000–30,000 victims of Sinai trafficking with about 622 million USD in ransom collected [17]. While the Egyptian government’s efforts have been successful in reducing these crimes, exploitation of vulnerable refugees may have simply shifted to other lawless zones.

Crossing the Mediterranean

Almost daily, powerful photos are emerging of refugees struggling to cross the Mediterranean – and in some cases, losing their lives in search of a better future. In 2015, an estimated 2,812 people have died crossing the Mediterranean Sea to date – an average of eight fatalities per day [18]. The International Organization for Migration estimates that about 75% of all refugee deaths worldwide are occurring in the Mediterranean [19].

Many human smuggling networks operate from the practically failed state of Libya, smuggling migrants mainly from Gambia, Senegal, Somalia, Syria, Eritrea, Ethiopia, Mali and Nigeria on wooden fishing boats or inflatable boats with no navigation capacities and engines which often fail. Usually a distress call is sent to the Italian authorities about 6–7 hours after departure from the Libyan coast [7].

Arriving in Europe

According to the International Organisation for Migration, out of 430,000 refugees and migrants who have reached Western Europe since the beginning of 2015, 390,000 have passed from Greek territory. Daily, more than 4000 refugees set foot on the island of Lesbos having traveled across on small boats from the Turkish coast. Most refugees continue their journey via mainland Greece, Macedonia, Serbia and Hungary [20].

Germany and other neighboring Western European countries are the primary destinations for refugees. In absolute numbers Germany has admitted most refugees of all EU countries, resulting in multiple healthcare challenges [21].

Health of refugees

For most refugees, the journey to Europe is fraught with a multitude of health threats, although it is a common misconception that refugees themselves constitute a significant health risk [22]. In this context, it is also important to emphasize that stigmatization of refugees is never justified and only risks creating or exacerbating threats to health. Long and exhausting travel under unsafe conditions and the interruption of health care can exacerbate chronic diseases. Dangers specific to the routes and border-crossings pose health threats to young and healthy migrants as well. People spend a long time hidden in overcrowded trucks or boats. Injuries, burns and dehydration are frequently occurring health problems. Traumatizing experiences in the country of origin or on the journey, and exposure to violence and the loss of family members, increase their vulnerability to communicable and non-communicable diseases. Children, pregnant women, elderly and immunocompromised people are particularly susceptible to health threats [8].

Food insecurity among refugees also creates many additional potential health threats. Starvation and malnutrition are a reality for many refugees [23, 24]. In addition, refugees may resort to trying to obtain food wherever they can. In Germany, this has had disastrous consequences where more than thirty refugees have become seriously ill and at least one refugee has died after ingesting poisonous mushrooms. It is believed that these mushrooms were consumed because they look similar to common edible mushrooms in Syria [25, 26, 27].

Infectious Diseases

Due to poor hygiene conditions in transit and in receiving facilities, diarrhea, acute respiratory infections, skin infections, scabies and head lice may occur [28, 29]. The supply of safe water and food may be limited during the journey. Unsanitary conditions can often be found at border points and in receiving facilities, with a lack of safe drinking water, shower facilities and regular removal of waste. The result can be outbreaks of food- and water-borne diseases such as salmonellosis, shigellosis, campylobacteriosis and hepatitis A [8].
Communicable diseases are often associated with poverty. An efficient health system, good housing, hygiene, vaccinations and clean water reduce the prevalence of diseases such as TB, measles, rubella, and hepatitis. They still exist in the European region, independent of migration. The influx of people from countries where infectious diseases are more prevalent can change the disease burden in Europe, although there is no proven association between migration and the importation of infectious diseases. Experience shows that if cases of exotic infections, such as the Ebola virus, occur in Europe it affects regular travelers or health care workers rather than migrants [8].

Other infectious diseases such as scabies have also emerged as a public health challenge. In Germany, Hamburg, health authorities declared a health emergency on August 21st due to an outbreak of scabies in an emergency shelter for newly arrived asylum seekers. At the time, only topical anti-scabies therapies were available within Germany (Permethrin and Benzylbenzoate) [30]. Ivermectin, an antifilarial on WHO's list of essential medicines [31] and the de facto oral therapeutic standard for scabies [32], is publicly available in France but only with indications for treatment of strongyloidiasis and elefantiasis not scabies [33]. On September 2nd, the Federal Ministry of Health declared scabies a dangerous communicable disease and authorized importation of Ivermectin without prior marketing approval [30].

The prevalence of HIV is low among people from the Middle East and Northern Africa [8]. Most HIV cases in migrants are found in Sub-Saharan African nationals. About 40% of HIV cases in Europe are migrants. There is also growing evidence that some migrant populations acquire HIV after arriving in Europe [34]. Antiretroviral treatment can be interrupted for refugees living with HIV with potentially devastating consequences. In some European countries, no HIV services are offered to people with uncertain legal status [34].

The majority of tuberculosis (TB) cases are detected in the native-born population in Europe, with substantial variation across European countries. People with severe cases of TB are often not fit for travel and therefore do not attempt the journey. TB is not easily transmissible and active disease occurs only in a small proportion of those infected. However, crowded and humid spaces such as those found in trucks and ships may facilitate the transmission of TB when an infected person is present [8]. The overall incidence is declining, while it is on the rise among migrants [34].

The mass influx of refugees increases the risk of the reintroduction of vector-borne diseases such as Malaria, Leishmaniasis and to the European region. Tajikistan and Turkey are at particularly high risk at the moment [8, 34, 35].

Outbreaks of measles, rubella and other vaccine-preventable diseases can occur in the migrant population and spread to unvaccinated people of the receiving country. There is still a gap in vaccination coverage in European countries due to refusal to vaccinate. In migrants' countries of origin, access to vaccinations is often considerably lower than in EU countries, creating conditions under which outbreaks may emerge. The 2015 outbreak of measles in Berlin had originated within a group of asylum seekers from Serbia and Bosnia and Herzegovina [36, 8].

In Turkey, registered refugees are provided temporary protection status and are then placed in provinces based on a national plan. However, the rapidly increasing number of refugees has made execution of this plan difficult and created new medical challenges. According to an official field survey report by AFAD in 2013, 26% of children in refugee camps and 45% of children not living in camps did not receive polio vaccination. One in three children in camps and 41% of the children out of the camps did not have measles vaccination [37]. This situation introduced the risk of polio to a country which was polio-free for more than 15 years. There has been also a rise in other infectious diseases including measles, tuberculosis and cutaneous leishmaniasis [38, 39].

Many developing countries experience a high burden of hepatitis B cases. Incidence is higher among migrants than among native populations in most European countries. Chronic infections are particularly increasing. In most cases, migrants acquired the virus in their countries of origin or from mother-to-child transmission [34].

In Lebanon, the sanitation conditions in refugee camps are very basic and a surge of diarrheal diseases has been observed in 2014 by the epidemiologic surveillance unit of the Lebanese Ministry of Public Health. Lebanon has seen an increase in the number of reported tuberculosis, hepatitis A and measles cases [40]. In addition, a vector borne disease, cutaneous leishmaniasis, which was not present in Lebanon before, has made its appearance with 476 cases in 2014, all in Syrian Refugees. There is a concern about the introduction of the sandfly vector to Lebanon, but this has not been proven with certainty yet. The community physicians have faced a major challenge in making a timely diagnosis of Leishmaniasis, a condition they had not been accustomed to evaluating and treating in the past [35]. Major education efforts for healthcare workers through tertiary care and academic medical centers in Lebanon, are undertaken to spread the knowledge about the disease.

NCDs

Noncommunicable diseases are a significant problem in the refugee population. Diabetes, cardiovascular diseases, chronic lung diseases and cancer are the most common of these. The exhausting and demanding circumstanc-
es of the journey often lead to exacerbations of chronic diseases. A common characteristic is that these conditions require regular and continuous treatment. The supply of drugs and the access to necessary procedures and care can be interrupted, resulting in poorer health outcomes including unnecessary morbidity and mortality [8, 41]. In the process of uprooting and social marginalization, migrants may lose self-esteem and feel powerless to manage chronic illness. The situation is exacerbated by linguistic barriers and a real or perceived inability to seek health care [42, 18]. For many refugees fleeing the Syrian civil war, access to non-communicable disease management and prevention may have been limited for years as the Syrian health care system has been "shattered" by the conflict with more than 75% of physicians having fled the country [43, 44]. Numerous reports have described attacks on health care facilities in clear violation of international humanitarian law [45].

Mental Health

The effect of migration on an individual is pervasive – everything in person's life changes: diet, family, culture, social relations, status, etc [46]. Migratory experience is essentially a psycho-social process of loss and change, which can be labeled as a grief process. This can be explained through a model comprising of seven griefs of losses that a person (migrant) will experience with time: "family and friends, language, culture, homeland, loss of status, loss of contact with the ethnic group, and exposure to physical risks" [46]. Reception in the intended destination country can be very important for completion of this grief process [46].

McColl et al. defined some pre-migration and post-migration adversities in the context of UK asylum applicants. Pre-migration adversities include war, imprisonment, genocide, physical or sexual violence, traumatic bereavement, lack of healthcare, etc., while post-migration adversities are the "seven Ds": discrimination, detention, dispersal, destitution, denial of the right to work, denial of healthcare, delayed decisions on asylum applications [47].

It is important to emphasize that the majority of refugees and asylum seekers do not suffer from a psychiatric condition [47]. In this context, traumatic experiences should be addressed without pathologizing normal human reactions [48].

A meta-analysis by Porter and Haslam found that, compared to non-refugees, refugees had somewhat poorer outcomes in psychopathology measures. They also found that the mental health outcomes are influenced by postdisplacement conditions, and that refugees who are living in institutional accommodation, economically restricted, internally displaced, persons who were repatriated, or whose initiating conflict was unresolved had worse outcomes. Worse outcomes were also found in more educated, older, female, persons with higher socioeconomic status and rural residence before the migration [49].

Studies suggest that two thirds of refugees experience anxiety and/or depression, and have a higher incidence of post traumatic stress disorder, panic disorder and agoraphobia, in addition to depression and anxiety [46]. Post traumatic stress disorder is the leading mental health condition among refugees and asylum seekers, probably connected to the experiences in the country of origin (persecution, conflicts, etc.) [46]. A review by Fazel et al. in 2005 found that refugees placed in Western countries were 10 times more likely to have PTSD than the general population [50]. There is also a difference between the group of migrants – for example, a Norwegian study found asylum seekers to have higher rates of PTSD than refugees [51].

In addition, asylum interviews are shown to have a stressful effect on asylum seekers, especially when the asylum seekers were already traumatized [52]. Apart from the procedural difficulties in obtaining asylum, access to healthcare also poses a major challenge for many refugees.

Undocumented migrants, or the migrants without legal status, face obstacles to receiving adequate healthcare services – particularly mental health services – in destination countries. Many times healthcare access for refugees is limited to emergencies curbing accessibility to mental health services and therefore influences the overall health of refugees.

It is important to protect and ensure adequate treatment of persons who are already suffering from a severe mental disorder. This group of refugees is particularly vulnerable and can be considered neglected in complex emergencies, such as conflicts [53].

Some countries provide mental health services to the refugees who enter their borders (e.g. temporary protection status in Turkey includes mental health services). However, resource shortages limit these services to life-threatening emergencies in many places.

Women and LGBT Health

Refugee women face higher rates of exposure to violence, sexual exploitation and abuse than men [54]. Risks increase on their journey and can be exacerbated by lack of access to emergency sexual assault treatment and obstetrical care [55]. The stress of the migratory process can also trigger or intensify intimate partner violence [56, 57].

Sexual violence, abuse, trafficking and rape by smugglers, officials, policemen and male refugees are a common experience among refugee women. Some may be forced into prostitution [58, 59, 60]. The selling of Syrian brides has become a business in Turkey. Unwanted pregnancies without access to safe abortions and venereal diseases without access to appropriate treatment may occur as a result [61, 62].
Refugees and Health Care

In July and August of 2015, 36160 Syrian males applied for asylum in the EU-28 only 10970 female Syrian refugees did so [63]. This is in sharp contrast to the 1:1 ratio worldwide. [64] It is reported that many families can only afford paying for one person’s trip and will send young healthy males as a pilot, hoping for their female family members to be allowed to join them later [65]. However, it should not be neglected that refugees are an even more vulnerable group [66, 67].

In Germany, emergency shelters are currently so overcrowded that males and females share sleeping space in gyms, as well as toilets and showers [66]. Even though authorities were not able to confirm, German NGOs reported widespread cases of rape and forced prostitution in an emergency shelters for new arrivals in Gießen, Hesse Germany [68].

According to a report from the German Institute for Human Rights on refugees and gender-specific violence, protection through “restraining and protection orders” are available for refugees as well; however, refugees’ choice of accommodations and even movement is limited by law. In many cases, only the husband claimed reasons for asylum and in that case under German law the partner’s asylum will depend on continued marriage. Legally violent partners may be separated to different accommodations even against a violent partners wishes and women’s shelters may be accessed, however, there are still many bureaucratic hurdles. In the case of violence, the Institute recommends either lifting restrictions causing vulnerability for victims or introducing fast track procedures for victims to offer them different shelters and making emergency accommodations available. It further recommends making refuge shelters safer places by ensuring lockable rooms and sanitary facilities, informing residents about their rights, setting up women’s rooms, sensitizing staff, integrating NGOs and ensuring there is female as well as male security staff at shelters [69].

Pregnant women in refugee or migrant communities can have limited access to antenatal care or safe delivery facilities [70]. This can result in late diagnosis and sometimes life-threatening conditions for mothers and their babies [8].

In addition, discrimination and violence based on sexual orientation and gender identity is an unfortunate reality for refugees who identify as lesbian, gay, bisexual, transgender, queer or intersex (LGBTQI). Although data are limited, anecdotal evidence suggests these refugees face additional health threats including psychological such as “humiliation” [71].

Implications for Health Systems: Examples

European Union

According to the Fundamental rights of migrants in an irregular situation in the European Union – Comparative report from 2011, in “19 out of 27 EU Member States migrants in an irregular situation are entitled to emergency healthcare only” [72]. For example, Croatia’s law on asylum (28th member state of the European Union) states that health care services for asylum seekers include emergency medical services.

Turkey

In Turkey, registered refugees are offered free primary healthcare services in public hospitals for both emergency and elective procedures. Since the beginning of the Syrian conflict, 4.383.907 outpatient visits have occurred in the temporary shelters and 4.914.920 polyclinic examinations were performed in hospitals across the country, while 389.837 of them ended up with inpatient service. 62.022 deliveries and 278.035 surgeries were performed according to official numbers [10]. This put the healthcare system of the country under extra stress, which had already limitations with the shortage of healthcare workers [73, 74].

Lebanon

Since the beginning of the Syrian conflict in 2011, Lebanon as one of the closest bordering states has witnessed a continuous influx of refugees to reach about 1.5 million in official numbers provided by the UNHCR. This has propelled the country into the pole position, having the highest refugee per capita in the world (232 refugees per 1000 inhabitants). The already strained healthcare system is now stretched very thin with the healthcare needs of the refugee population [75]. The drop in vaccination rates in Syria has impacted the reemergence of infectious diseases thought to be close to eradication from Lebanon such as measles [76, 43].

Greece

Greece faces an unprecedented economic crisis that has led the country to a continuous depression since 2010. The current refugee crisis creates therefore tremendous problems in Greece, which the Greek state cannot handle by itself. As a common point of entry to Europe, lack of first reception and accommodation infrastructure in Greece may exacerbate public health issues and prove hazardous to refugee populations and local societies. It is a humanitarian need that healthcare services and infrastructure in Greece, a country at Europe’s doorstep, be financially supported by European funds to ensure refugees have access to holistic care upon arrival in Europe [77].

Germany

Upon arrival, refugees receive a preliminary medical examination and are offered vacci-
nations according to German national recommendations. Due to this policy and the sheer number of refugees, vaccine stocks for many combination vaccines were exhausted during the summer of 2015 [78]. Refugees are distributed throughout Germany under a pre-agreed quota system [79]. Local authorities are required to provide food and shelter for refugees, sometimes with a few hours of prior notice [80]. In order to meet the need, gyms, empty school or stores and tents have been set up as make-shift shelters with only basic sanitary services available [21].

Overall, under German law, refugees are entitled to free healthcare for alleviating pain and acute disease. The only exception being pregnant women, who are entitled to the same health care standard as all publicly insured women [81]. Until recently refugees had to first go to public administration receive a written approval before having their doctors visit for acute disease covered. This has often been criticized as discriminatory, especially as public officials in charge of granting the visit had no formal medical expertise [82]. Recently most states changed statutes to issue refugees standard German health insurance cards [83]. They do not extend coverage, however, allow refugees to see doctors without prior approval and for doctors to receive reimbursement through standard health insurance processes.

**Conclusion**

People travel with their health profiles, values, culture and beliefs. Health workers in Europe and beyond need to be aware of this and have the necessary knowledge to provide high quality care to refugees. Recipient countries must be prepared to be responsive in the event of a crisis, so as to deliver basic services to migrants in recognition to their basic human rights [28].

Large numbers of people moving between countries may have implications for the character and distribution of a country or region’s disease burden. Acute conditions, many of them infectious disease, psychiatric illness or injuries sustained fleeing their home countries might be the most obvious. Many refugee lack access to mental healthcare and delayed treatment for mental health problems may worsen refugees’ prognosis. Attention must be given to persons with pre-existing psychiatric disorder as well as other vulnerable groups.

However, host countries themselves are also important factors for refugees’ health. Cultural and language barriers can in worst case cause innocent, yet deadly confusion. The basic rules of hygiene and sanitation are an important factor for today’s increased life expectancy [84], ensuring these basic rules for refugees should be of immediate concern.

However, we believe that after the acute phase refugees and health care systems will adapt to each other and chronic conditions will set in. The social determinants of health have been shown to be crucial for health [85] and first and second generation immigrants face many challenges, amongst them often lower wages and less education [86]. While today’s situation may seems to be a crisis, it should not be forgotten that refugees health challenges will not end when an asylum decision has been made. Like with any other human being, health is a lifelong process even setting the course for future generations. For this reason, it is critical that governments, national medical associations and health professionals ensure a sustained, timely and appropriate response to the health implications of refugee crises [87, 88]. Refugee health is public health.

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