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COVID-19 barriers and response strategies for refugees and undocumented migrants in Turkey

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ABSTRACT

Introduction: With more than 40 million confirmed cases of COVID-19 globally, the pandemic is continuing to severely challenge health systems around the world. Countries with high numbers of refugees face an additional burden on COVID-19 preventive and curative services made available and accessible to refugees. Turkey hosts the largest number of refugees globally, with a total of 4 million in 2020. Over 98% of refugees in Turkey reside in urban areas in large, crowded cities such as Istanbul, Gaziantep, and Hatay posing severe challenges for all health responses, including COVID-19. This study provides insights and analysis on the current situation for refugees, migrants under temporary protection and undocumented migrants in Turkey by focusing on the right to health and access to health care under pandemic conditions. Its main aim is to discuss the challenges and opportunities for COVID-19 responses relating to refugees, migrants under temporary protection and undocumented migrants in Turkey.

Methods: This is a non- systematic and exploratory literature review from academic and grey sources. We reviewed published documents, meeting summaries, media reports/news and policy briefs in Turkish and English on the COVID-19 response in Turkey.

Results: Since the start of the COVID-19 outbreak in Turkey, the Ministry of Health (MoH) has taken various steps to provide health care for all residents. However, several challenges arise when providing health care to refugees, migrants under temporary protection and other undocumented migrants including language barrier in accessing reliable information and access to health services for existing chronic conditions.

Conclusion: While refugees, migrants under temporary protection and undocumented migrants have been granted access to services for COVID-19 related health problems, social and cultural barriers remain beyond the current legislation. Solidarity and whole-of-society inclusive approaches should always be the guiding principles in the COVID-19 response.

Introduction

Turkey hosts the largest number of forced migrants in the world, with around 3.6 million Syrians under temporary protection and around 400,000 refugees and asylum-seekers of other nationalities [1]. Refugee status is the main determinant of access to health care in Turkey, which poses a unique case in defining the refugee status according to international standards. Various migrant groups live in Turkey, with the majority from Syria who are provided with temporary protection. On 11 April 2013, a Law was passed to define the legal status and the rights of international migrants titled "Law on Foreigners and International Protection". Under this law, a refugee is defined as *"a person who as a result of events occurring in European countries and owing to 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 citizenship and is unable or, owing to such fear, is unwilling to avail himself or herself of the protection of that country; or who, not having a nationality and being outside the country of his former residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it, shall be granted refugee status upon completion of the refugee status determination process."* This definition contains a geographical limitation clause, as Turkey only grants refugee status to individuals from European countries. Individuals outside of European countries are assessed under the "conditional

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refugee" status and the status of temporary protection is provided to "*foreigners who have been forced to leave their country, cannot return to the country that they have left, and have arrived at or crossed the borders of Turkey in a mass influx situation seeking immediate and temporary protection* [2]." According to Turkish legislation, refugees with temporary protection have the right to health insurance, however, they can only access free health services in the same city where they registered for temporary protection. Under the Law when allocating refugees, the DGMM allocates refugees, conditional refugees and ones with subsidiary protection to slightly more remote cities known as "satellite cities" [3,4]. However, many refugees choose to reside in the major cities where there are often more job opportunities. Syrians living under temporary protection have engaged in informal jobs with substandard payments [5].

Syrians living under temporary protection are allowed to work in agriculture and animal husbandry, however many other sectors require a work permit that is hardly obtained due to bureaucratic and financial burden it brings upon employers [6]. Sixty four percent of Syrian households in urban settings live under poverty level and 18% below extreme poverty. Currently 1.4 million Syrians are provided unconditional cash transfers for their costs such as rent, utilities and food under Emergency Social Safety Net. However, these financial support programs come short of ensuring quality living conditions. Most Syrian households can only afford living in substandard and overcrowded housing conditions with limited access to safe water and sanitation. On the other hand, Syrians living in temporary accommodation shelters have easy access to utilities and services including education, healthcare and e-vouchers for food [7–9].

According to recent figures from the Turkish Directorate General of Migration Management (DGMM), over 98% of refugees in Turkey reside in urban areas, with less than 2% living in temporary shelters [10]. Large, crowded cities and urban areas such as Istanbul, Gaziantep, and Hatay pose severe challenges for all health responses, including COVID-19. The COVID-19 response for refugees in Turkey is based on the country's previous experiences in dealing with infectious diseases among refugee populations.

After receiving increasing numbers of refugees from Syria, there were increasing numbers of gastroenteritis cases, mostly due to Hepatitis A among children, cutaneous leishmaniasis and malaria followed by vaccine preventable disease outbreaks of polio and measles [11]. There were vaccination campaigns in Turkey to manage vaccine preventable diseases, intensified screening and treatment programs in temporary shelters for TB and malaria, and extensive treatment for cutaneous leishmaniasis including environmental health measures [11].

In recent years, the Turkish Government's spending on humanitarian assistance, internally on refugees within Turkey and internationally on humanitarian aid, has surpassed all developed countries both in actual amount (USD$8.399 million in 2019) and as per gross national income (GNI) (0.79% of GNI in 2019) [12]. However, the COVID-19 pandemic imposes additional political and economic challenges that significantly hinder the country's capacity to meet the needs of all populations [13]. Some of the most vulnerable groups, refugees and undocumented migrants in particular, face additional challenges in accessing essential services such as health care. The United Nations Educational, Scientific and Cultural Organization (UNESCO) International Bioethics Committee emphasises the need to take note of vulnerable groups in countries' mitigation responses to the COVID-19 pandemic, with an emphasis on isolation and quarantine measures that risk creating stigma for refugee groups [14].

This study provides insights and analysis of the current situation for refugees and undocumented migrants in Turkey by focusing on the right to health and access to health care under pandemic conditions. In this paper, the term *refugee* refers to migrants including asylum seekers, undocumented migrants, people from Syria living under temporary protection, and people living under international protection. The main aim is to discuss the challenges and opportunities for COVID-19 responses relating to refugees and undocumented migrants in Turkey.

Methods

This is a descriptive literature review article [15] based on extensive academic and grey sources. We searched PubMed, Google Scholar, ULAKBIM (Turkish Academic Network and Information Center) for academic peer reviewed sources and we conducted a Google and Reliefweb search for grey literature. We have reviewed online materials published in Turkish and English. In both languages the search terms included the following keywords: Turkey; refugees; migrants; undocumented migrants; forced migrants; COVID-19; severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2); coronavirus; health; access; cities; urban; Istanbul; health systems; barriers; women; gender, gender-based violence. For the grey literature we reviewed documents, meeting summaries, and policy briefs in Turkish and English on Turkey's COVID-19 response. We particularly focused on published documents from the Turkish MoH and other governmental and Non-Governmental Organizations (NGOs) that provide information on migrant populations, including refugees in Turkey. These included the DGMM, International Organization for Migration (IOM), and UNHCR. We also included newspaper and online news media articles in our analysis. We have defined thematic areas for response to COVID-19 pandemic such as right to COVID-19 related health services, access to healthcare and information, and challenges. We have retrieved and extracted the information from the documents accordingly.

Results

As of October 2020, the total number of immigrants in Turkey is approximately 5 million. According to the DGMM and UNHCR, there are 3.6 million Syrian refugees of which only 1.8% live in temporary shelters. Most Syrian refugees have been granted protection through the Turkish government's Temporary Protection Regulation. The majority of Syrian refugees live in urban cities, with Istanbul, Gaziantep, Sanliurfa and Hatay hosting the highest numbers [10]. While Istanbul is classified as a region itself (Table 1), Hatay is located in Mediterranean Region and it is the western neighbour of Gaziantep which is located in Southeastern Region together with Şanlıurfa. These three provinces – Gaziantep, Şanlıurfa and Hatay– are provinces bordering northern Syria.

In addition to Syrian refugees, there are close to 400,000 asylum seekers and refugees from other countries, including Afghanistan and Iraq [1]. Around one million immigrants hold residency permits for study, work and tourism purposes [16]. Additionally, it is estimated there are some 62,000 undocumented migrants [17]. The international response to support refugees in Turkey has been limited. The Turkish government leads the response with support from local authorities and community organizations. The UNHCR provides technical and operational support. However, its operations in Turkey face severe funding shortfalls with only 32% of their 2019 operational plans funded [1].

The first meeting of the Scientific Committee in Turkey evaluating the COVID-19 situation was held on 22 January 2020 in Ankara, shortly after the World Health Organization's (WHO) declaration on human-to-human transmission of the coronavirus on 14 January 2020. Turkey initially cancelled flights from China on 3 February 2020 and began tracking passengers arriving from abroad with thermal cameras at airports, shortly after the WHO declared COVID-19 as a Public Health Emergency of International Concern (PHEIC) on 30 January 2020. The first case of COVID-19 in Turkey was reported on 10 March 2020, with the first death declared a week later on 17 March 2020. Just a week after the declaration of the index case by the Turkish authorities, restrictions such as gathering in public places, school closures, and the cancellation of international flights from 19 countries were implemented. In the following week, the Turkish MoH authorized the establishment of pandemic hospitals to provide care for COVID-19 patients and emergency patients only, cancelling non-emergency or non-urgent services. The government banned the elderly (age 65 and over) from leaving their homes and extended the ban to those under the age of 20 shortly after, excluding

Table 1
Number and incidence per 100,000 population of COVID-19 patients* and deaths by geographical regions, Turkey (Source: Ministry of Health, 14-20 September 2020)

Region	Total number of patients*	Number of new Patients (14–20 September)	Patients/100,000 Population	Total number of deaths**	Number of deaths/100,000 population
Istanbul	125,253	1,507	807.1	2,986	19.2
Western Marmara	3,629	79	100.8	191	5.3
Aegean	19,486	764	183.5	668	6.3
Eastern Marmara	28,718	639	353.5	670	8.2
Western Anatolia	35,421	2698	436.0	822	10.1
Mediterranean	12,897	1.027	121.4	263	2.5
Central Anatolia	12,642	1496	310.2	284	7.0
Western Black Sea	9,666	659	207.2	290	6.2
Eastern Black Sea	4,456	275	165.6	150	5.6
Northeastern Anatolia	6,388	436	290.4	133	6.0
Mideastern Anatolia	10,207	1093	259.7	196	5.0
Southeastern Anatolia	35,107	1,032	391.1	853	9.5
Turkey	303,870	11,705	365.4	7,506	9.0

*As of the end of July, MoH started to report number of patients instead of number of cases. Patients are defined as "*cases with symptoms*".
** * The total number of deaths including the date 20 Sep. 2020.

people working in essential services. The government restricted travel between certain cities in Turkey and gradually cancelled flights to and from 71 countries. The government monitored air passengers both internationally and domestically and notified WHO of confirmed cases and their close contacts in accordance with the International Health Regulations (2005) [18,19]. Finally, on 16 March 2020 the government declared a lockdown for weekends and public holidays for everyone except those working in essential services [20,21]. To date, here has not been a complete lockdown in Turkey.

As of 20 September 2020, the number of cases reported were 303,870 while the number of deaths were 7,506 and total number of tests performed were 9,287,991 [22]. This is compared to 30,675,675 confirmed cases and 954,417 deaths globally [23]. The MoH stated that refugees were among the COVID-19 patients and the deceased, however, there is no separate data publicly available for refugees and undocumented migrants [9]. The statistics on COVID-19 in Turkey are limited to daily and cumulative numbers of cases, deaths and total numbers of tests performed by the MoH. The MoH published a short report with limited demographic information on COVID-19 patients and deaths on 30 June 2020. According to the report, 52% of the cases were male and half were between 25-49 years of age [24]. However, there is no information on nationality of the cases and deaths and no provincial breakdown (Fig. 1, Table 1).

Refugees and undocumented migrants' right to health care in Turkey during pandemic

With 98.8 % of registered refugees residing in urban settings and the vast majority of COVID-19 cases occurring in urban settings [1], cities play an important role in determining how migrants in Turkey access health services. For example, major cities such as Istanbul, Ankara, and Izmir are not considered satellite cities and applicants for temporary protection can only reside in these cities temporarily pending their referral to a satellite city [25]. This means they risk losing access to free health services provided in satellite cities. When assessing the role of cities during disease outbreak, policies are often implemented at the national or international levels of government, yet it is local public health and political officials who are responsible for outbreak or pandemic management in cities. A lack of governance, poor planning and decentralized health care systems can undermine pandemic responses, often generating confusion, fear and higher costs [26]. Therefore, municipalities require adequate tools and resources to respond to public health emergencies [27]. Cities can add strategic value to existing arrangements and can form multi-city coalitions capable of representing urban interests on a global scale [28]. In Turkey's satellite cities, access to free health services was changed only prior to the COVID-19 outbreak. In satellite cities, people with temporary protection previously had the same rights as Turkish citizens regarding access to health care [29] until the end of 2019, when new legislation (effective from 1 January 2020) was approved obliging this group to pay for their health insurance [30, 31]. These changes were influenced by Turkey's economic problems that were evolving during the preceding months of the COVID-19 outbreak. Turkey has struggled with a high unemployment rate, rising inflation, and the subsequent devaluation of the Turkish Lira since 2018 [32,33].

Migrants seeking to obtain a residency permit are required to purchase public or private health insurance. However, undocumented migrants have no such option, and most have to pay for all health services including emergency care. Family Health Centers and Migrant Health Centers (MHC), however, provide primary health care (PHC) services free of charge, irrespective of the legal status of migrants. The scope of PHC services include preventive and curative services, and routine follow up of certain groups such as pregnant women and infants. MHCs are part of a European Union (EU)-Turkey project, *Improving the Health Status of the Syrian Population under Temporary Protection and Related Services Provided by Turkish Authorities* (SIHHAT). Its objective is to improve access to health care for Syrian refugees. EU funds were used to build 180 MHCs in 29 cities by the MoH in collaboration with the WHO. Also, as of October 2019, approximately 1,300 [34] Syrian health care workers have been employed by the Turkish MoH to work in these MHCs to overcome language barriers and support the delivery of culturally sensitive services [35]. There are also some other MoH outpatient clinics in different cities providing free of charge services for non-Syrian refugees.

Although no-one is denied access to emergency health services, the absence of health insurance means that a service bill is issued which must be paid by the patient before being discharged from emergency care [36,37]. Patients with health insurance have to pay a small amount of co-payment for outpatient or in-patient services in hospitals. If the patient has no insurance, the service fee has to be paid in full [38].

Response activities to COVID-19 pandemic for refugees and migrants in Turkey

Activities related to education, communication and awareness

In PHC services, patients are informed about COVID-19 and those with symptoms are referred to hospitals for testing. COVID-19 diagnosis and therapy guidelines used nationwide have been translated into

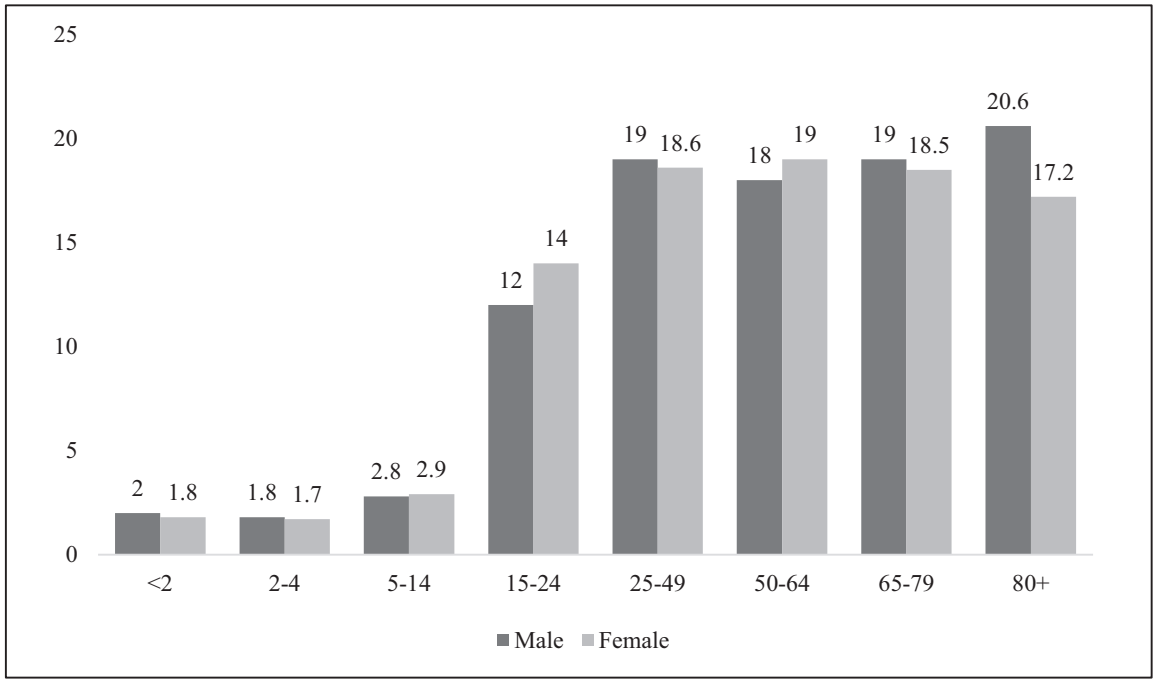

Fig. 1. Number of new COVID-19 patients/100,000 population in Turkey by age group and sex as of 14-20 September 2020 (Source: Ministry of Health, September 2020).

Arabic for Syrian health workers working in MHCs. Additionally, personal protection equipment (PPE) has been distributed to MHC health workers.

Health education and communication leaflets have been prepared by various government and non-government organizations on transmission routes of the disease and preventive and protective measures. The WHO and MoH created a website on COVID-19 for refugees [39]. The MoH also prepared COVID-19 information in Arabic to be distributed through leaflets, social media and mobile phone communication. The Istanbul Municipality shared videos in Arabic on transmission routes and preventive measures for COVID-19. Many local and international NGOs working with refugees have also published information, including flyers and videos, on COVID-19 in different languages, primarily Arabic and Persian [40-42]. As part of the SIHHAT project, Syrian health workers prepared videos to provide health information on COVID-19 for refugees.

Health care provision and diagnostic testing

Testing and treatment for COVID-19 was recognized as an "emergency condition" by the Turkish government, thereby enabling access to these services free of charge for everyone. This was regulated via an amendment to the Social Security Institution Legislation on 9 April 2020 and a Presidential Decree on 13 April 2020 that assigned state hospitals and some private hospitals to provide testing and treatment services for COVID-19 to anyone regardless of their legal status [43,44]. However, there have been problems implementing this due to the lack of a written regulation about how to register unregistered or undocumented migrants who do not benefit from general health insurance and it is furthermore unclear if hospitalisation is covered [45].

Screening activities

The government implemented restrictive measures for entry to and exit from refugee camps, including measuring body temperature for everyone before entry. Individuals with symptoms, such as cough and muscle pain, are consulted about their possible contact with COVID-19 positive people. Suspected COVID-19 cases have been transferred to the closest hospital, tested for COVID-19, and, depending on their condition, sent back to camps for isolation.

Challenges encountered in health care services during the COVID-19 pandemic

Documentation

The latest legislation on testing and treatment of COVID-19 is important in addressing the barriers for accessing health care, yet several challenges remain. Firstly, registration processes of undocumented patients in health centers face significant delays. There is an optional "stateless" category in the MoH registration system that can be used for undocumented migrants. However, this option has not been implemented in every health center as it is largely dependent on the health care providers' decision to accept an undocumented patient or not. Secondly, one of the preventive measures for COVID-19 implemented by the Turkish government was the enforced use of face masks in public spaces. The government subsequently regulated the distribution of free masks through pharmacies; people would receive a text message to collect their masks according to their ID number. However, there are many migrants who do not have an ID number which limits their access to the masks.

Fear of deportation and stigmatization

Undocumented migrants have restricted access to health care and if or when they seek health care, they risk being reported to the police [46]. There is widespread fear among many refugees, and particularly undocumented migrants, of deportation or losing their residency if they test positive for COVID-19. Also, the fear of stigmatization if they test positive for COVID-19 prevents individuals from seeking health care. Therefore, acquiring information about the accurate number and names of contacts from these migrant groups becomes highly sensitive and difficult [47].

Language

Arabic translators have been employed in some public hospitals to aid in mitigating the language barriers. Yet the availability of translators is generally quite limited compared to demand, even in hospitals where they currently work. Health workers also grapple with language barriers during contact tracing activities for refugees, which causes gaps in identifying accurate numbers of contacts [48].

Access to health care for problems other than COVID-19

Most hospitals have been transformed into "pandemic hospitals" which limits hospital access for other health problems. There is a lack of information on where to go for pregnancy follow-ups, childhood vaccinations, and chronic diseases for example. Information on antenatal, prenatal and postpartum care is especially important for refugee women as lack of clarification often results in home births putting the lives of mothers and babies at risk. Continuation of routine immunization services as well as routine follow-ups for chronic conditions are other areas for which many refugees need clear information. A report by Turkish Red Crescent (TRC) and International Federation of Red Cross and Red Crescent (IFRC) shows that only 22% of Syrian Refugees have access to healthcare services for their special needs including disability, chronic conditions and pregnancy [49]. NGOs working with refugees are also experiencing difficulties in obtaining accurate information on which hospitals have capacity to provide services for non-COVID-19 patients.

Repatriation centers and quarantine conditions

There are several repatriation centers for refugees in Turkey, however, there is very limited data on the health status of refugees living in these centers. Following a press briefing on 18 April 2020 announcing that there were 30 COVID-19 positive cases among refugees in the repatriation center in İzmir, the İzmir Bar Association released a report on the condition of refugees in İzmir Harmandalı Repatriation Center during the pandemic. The report highlighted several issues at the center: there were no isolation rooms for COVID-19 patients; the number of undocumented migrants sharing the same room decreased gradually from 15 to 4 between March and April; there were no periodic cleaning services or garbage collection for common spaces; the cleaning materials distributed to residents were insufficient and were not free-of-charge; there were periodic temperature measurements in the mornings, however, if one of the residents had a fever they were only treated with antipyretics and physician visits were very limited [50].

At the end of February 2020, around 5,800 refugees moved from their resident areas to the Turkish-Greek border because of statements from the Turkish government that the border would open for passage to Greece for refugees seeking entry to Europe. However, the border was closed on the Greek side and those who were unable to cross the border were obliged to stay in a temporary migrant shelter for COVID-19 quarantine beginning on 27 March 2020. At the end of the quarantine, on 12 April 2020, many of the migrants faced financial difficulties and could not afford to return to the cities where they previously resided. Later in April, most of them returned to their resident cities with the assistance of NGOs and local authorities [51,52].

Socioeconomic challenges

Most refugees reside in crowded households in which two to three families have to share space. Such living conditions lead to difficulties in adhering to guidance on patient isolation and shielding. The living conditions of most refugees requires improving hygiene and sanitary conditions [53]. Syrian refugees living in temporary accommodation centers (TACs) have been receiving assistance from DGMM for healthcare, education and financial support as well as food vouchers. Therefore 91% of the households have reported acceptable level of food consumption [7]. However, there are concerns about the COVID-19 transmissions on TACs because of overcrowded households, shared utilities such as water supply, baths and kitchens all of which make it difficult for physical distancing and handwashing [54].

There are many seasonal refugee workers in Turkey. Preventive measures have been announced regarding the living and working conditions during the COVID-19 outbreak for seasonal workers [55]. Nonetheless, the living and working conditions of seasonal refugee workers pose COVID-19 associated risks. For example, the shelters they live in during seasonal work are mostly located in rural areas which may cause a delay in seeking medical care [56,57].

According to TRC and IFRC study 69% of refugees have lost their jobs during the pandemic [49]. Another report by 3RP have shown that in addition to high rates of shut-downs among Syrian run businesses, 83% of the Syrian respondents have reported that their employment status has been negatively impacted by the pandemic, which has led to a decrease in purchasing power of the households, rise in the household debt and restricted food consumption [58]. Along with food insecurity, unemployment is worsening refugees' livelihoods as they lose their ability to afford rent, and hygiene materials which negatively impacts their health and wellbeing [59]. TRC and IFRC study showed that 52% of the households borrowed money to afford food consumption and 24% to pay their rent [49]. For refugees who have not lost their jobs, many have a limited income which means they need to continue working even if they test positive for COVID-19.

These economic barriers are increasing as many refugees face out-of-pocket expenditure on health care as a result of changes in the health insurance requirements which are likely to increase with the COVID-19 crisis. The right to health and right to the social determinants of health are not stipulated among the fundamental rights of refugees in Turkey [60]. Prior to the pandemic, Syrian refugees were often employed as cheap, unregistered labour in agriculture, industry and small enterprises. These jobs are temporary and lack social security. The legislative regulations for hiring refugees under temporary protection are inadequate [61]. Poor working conditions increase the risk of refugees acquiring COVID-19. Living conditions and resources are extremely inadequate for refugees to follow the recommended COVID-19 preventive measures. Additionally, it is very hard for refugees to adhere to quarantine or implement the recommended home care for mild cases during isolation or for those that are not treated in the hospital [14].

Gender impacts

It is already well established that women migrants have limited access to health care services in Turkey [62]. This is only exacerbated by the pandemic and puts refugee women at increased risk of harm. Social distancing and confinement measures has increased the risk of domestic violence towards women and has reduced access to their normal social support structures [63]. According to UN Women, only in Istanbul violence against women has increased by 38% since the beginning of pandemic response measures in March 2020 [64]. The 3RP report indicates that the 38% of the refugee households report increased level of stress and 13% increased level of conflict within the household which requires immediate protection concerns for especially women as most refugee women would avoid reporting such incidents to the police because they fear deportation or increased domestic violence [58]. In August 2020, DGMM and UNHCR have launched an information campaign countrywide available in Arabic, Farsi, Turkish and English to provide messages regarding prevention and response to sexual and gender-based violence, mental health and referral pathways of services for mental health and psychosocial support [65]. It is particularly important for Syrian women as only 20% of Syrian women can speak Turkish [66].

Key recommendations for the COVID-19 response for refugees and other vulnerable migrant populations living in Turkey

Firstly, to address language barriers, there is an urgent need for collaboration with NGOs working with refugees to provide translation services in health care settings, namely Arabic, Farsi, English, and French speakers, to help communicate with Turkish health care providers. Easing government restrictions on Arabic-speaking migrant health professionals to practice, including refugees, would support these measures in further alleviating some of the barriers for refugees accessing health care services [67].

Secondly, there is an identified gap in accessing reliable information from government authorities, including the MoH [40]. There is a need for specific information on which health centers are accessible, their location, and how to obtain COVID-19 testing and treatment for refugees. Videos and written materials can be prepared for this. Accurate information is also required on which health centers are accessible for non-COVID-19 patients for antenatal, prenatal and post-partum care, childhood immunization and chronic disease follow-ups. Also, transparent information on the COVID-19 status of refugees along with their country of origin (number of daily cases, hospitalizations, number of patients in ICU units, hospital discharges and mortality rate among refugees) should be made publicly available.

Thirdly, it is crucial that information and support is gender sensitive. This will aid in supporting migrant and refugee women access appropriate services. These include programs and hotlines for women and girls who are at risk of domestic violence in different languages. NGOs working with refugees are in a position to distribute accurate information on the resources available for victims of violence.

Fourthly, health insurance coverage should be extended to all cities without limitation on registration; health services should not constitute a travel control system for people seeking medical assistance [29]. Municipal to municipal collaborations would support this and provide a platform for improved data and information gathering and sharing, which may in turn support improved policies for refugees and undocumented migrants accessing health services during the pandemic, especially for individuals living outside cities where they initially received temporary protection. Mechanisms put in place to protect undocumented migrants' access to healthcare and treatment for COVID-19 should be included in extension problems.

Fifthly, there is need for regulations that enable undocumented refugees to register at hospitals and health centers. Additionally, specific regulations are needed for those who are more vulnerable, including individuals living in camps, informal settings, repatriation centers, seasonal refugee workers and refugees on the move. These vulnerable groups should also be granted access to PPE and health care. For seasonal refugee workers, there should be more collaboration between the national government and local governments and municipalities to support access to timely health care services through specific short-term arrangements for these workers.

Sixthly, refugees who have lost their jobs require economic and social support. Data shows that vulnerable and disproportionally affected groups, including single and female headed households and individuals suffering from pre-existing health conditions, were the least likely to have had any source of income prior to COVID-19 and those who were employed are the least likely to have retained their job during COVID-19. These groups risk being pushed deeper into deprivation as many NGOs have suspended activities or switched to remote work while many government services have also been suspended [68]. The lack of income and increasing cost of health services greatly exacerbates refugees' vulnerabilities in Turkey in the wake of COVID-19 leading them to negative coping mechanisms such as selling goods, child labour, early or forced marriages and reduced food consumption [49]. Therefore, local governments and international humanitarian organizations should step in to provide support mechanisms regarding unemployment, as well as for those who need to stay at home for quarantine and isolation purposes.

Conclusions

Turkey, as the country that hosts the most refugees globally, has granted access to basic social services for Syrian refugees since the beginning of the Syrian conflict. The right to access COVID-19 testing and treatment were extended to undocumented migrants and asylum seekers who are mostly non-Syrian. However, there are certain aspects of the pandemic response in Turkey that necessitates improvement to support refugees, asylum seekers, and undocumented migrants.

The pandemic response requires a strong surveillance system with transparent data sharing. There is a need for disaggregated data to understand the impact of COVID-19 among refugees in Turkey. This would aid in determining the incidence rate and levels of compliance with quarantine and isolation measures for patients and their contacts, and reasons for non-compliance. Understanding what prevents refugees from complying with government mandated regulations, along with non-pharmaceutical interventions, will help develop more effective support mechanisms for refugee populations.

Prevention of COVID-19 transmission in the community requires isolation of patients, quarantine of contacts, and non-pharmaceutical interventions, including wearing a mask, physical distancing and hand washing. Successful implementation of these interventions for refugees is largely dependent on their living and working conditions. It is well documented that many refugees in Turkey live in crowded housing conditions, which may lack the necessary hygiene standards to prevent the transmission of COVID-19. Unfavourable working conditions, informal jobs and job losses during the pandemic have further complicated the situation for refugees. Subsequently, the economic status of refugees can be considered one of the greatest challenges in coping with the pandemic for refugees. Providing support to meet the basic needs of refugees by improving their living conditions and economic status is of utmost importance to control the transmission of COVID-19.

While refugees, asylum seekers and undocumented migrants have been granted access to services for COVID-19 related health problems, there remains social and cultural barriers beyond the legislation. Fear of deportation and language barriers, especially for non-Syrian refugees, hinder efforts to provide access to COVID-19 testing and treatment services. Therefore, in addition to expanding available language support from Arabic to several other languages, the MoH and Ministry of Interior should collaborate to develop a trust based COVID-19 communication strategy with refugee groups. Such a strategy should also ensure inclusive approaches to prevent further stigmatization and discrimination of refugees at both the community level and in health care settings. Solidarity and whole-of-society inclusive approaches should always be the guiding principles in the COVID-19 response.

Author Contributions

SBO, IK, DM and SS conceptualised the paper, drafted the initial version of the manuscript and provided data from Turkey. AE, KM and PP revised sections and helped with editing the paper, providing contextual literature to support the initial analysis done by the Turkish team.

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Declaration of Competing Interests

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References

Akar, S, Erdoğdu, MM., 2019 Aug 15. Syrian Refugees in Turkey and integration problem ahead. J. Int. Migr. Integr. 20 (3), 925–940.

Açıkgöz, Ö, Günay, A, 2020 Apr 21. The early impact of the Covid-19 pandemic on the global and Turkish economy. Turk. J. Med. Sci. 50 (SI-1), 520–526.

Akik, C, Ghattas, H, Mesmar, S, Rabkin, M, El-Sadr, WM, Fouad, FM, 2019 Dec. Host country responses to non-communicable diseases amongst Syrian refugees: a review. Confl. Health 13 (1), 1–3.

Association of Public Health Professionals, *Yeni Koronavirüs Hastalığı (Covid-19) Pandemisine Türkiye'de Hazırlıklılık ve Yanıt: 28. Gün Değerlendirmesi*, https://korona.hasuder.org.tr/pandeminin-28-gun-degerlendirmesi/, Accessed 30 June 2020.

Acuto, M., M.M., Chan D., Leffel, B., 2016. 'City Diplomacy' and Twinning: Lessons from the UK, China and Globally. Government's Foresight Future of Cities, UK.

Akay Erturk S., The effects of COVID-19 on Syrian refugees in Turkey, https://southernresponses.org/2020/04/24/the-effects-of-covid-19-on-syrian-refugees-in-turkey/?fbclid=IwAR1My4lqJRrSxODSKshkjvXKrxZ1h4dLQgIbAu5o8eUdT32g18aqMyJk-BQ, Accessed 27 April 2020.

Caman OK, Muge Cevik MD, Mardin FD. Situational Brief: Report On Forced Migrants And Covid-19 Pandemic Response In Turkey. Availabla at http://www.icc.org.tr/uploads/documents/lancet.pdf, Accessed 23 October 2020.

Danish Refugee Council, COVID-19 Impact on Refugees in South East Turkey, May 2020 https://reliefweb.int/sites/reliefweb.int/files/resources/76662.pdf, Accessed 30 June 2020.

Defending agricultural workers, in a pandemic and beyond, http://www.iuf.org/w/?q=node/7426, Accessed 27 April 2020.

Doganay, M, Demiraslan, H., 2016 Aug 1. Refugees of the Syrian civil war: impact on re-emerging infections, health services, and biosecurity in Turkey. Health Secur. 14 (4), 220–225.

Development Initiatives. Global Humanitarian Assistance Report 2019. https://devinit.org/resources/global-humanitarian-assistance-report-2019/, Accessed 27 June 2020.

Demirbilek, Y, Pehlivantürk, G, Özgüler, ZÖ, MEŞE, EA, 2020 Apr 21. COVID-19 outbreak control, example of ministry of health of Turkey. Turk. J. Med. Sci. 50 (SI-1), 489–494.

Ergönül, Ö, Tülek, N, Kayı, I, Irmak, H, Erdem, O, Dara, M, 2020 Mar 1. Profiling infectious diseases in Turkey after the influx of 3.5 million Syrian refugees. Clin. Microbiol. Infect. 26 (3), 307–312.

Ekmekci, P.E., 2017. Syrian Refugees, Health and Migration Legislation in Turkey. J. Immigr. Minor. Health 19 (6), 1434–1441. https://doi.org/10.1007/s10903-016-0405-3.

Heinrich Böll Stiftung Brussels. Migrants and refugees in a time of pandemic: access to healthcare services in Turkey. 18 May 2020 https://eu.boell.org/en/2020/05/18/migrants-and-refugees-time-pandemic-access-healthcare-services-turkey, Accessed 21 June 2020.

Hürtaş, S., 31 March 2020. Turkey's femicide toll soars amid coronavirus lockdowns. Al-Monitor. https://www.al-monitor.com/pulse/originals/2020/03/turkey-women-domestic-violence-soars-coronavirus-lockdowns.html.

Halk Sağlığı Uzmanları Derneği (HASUDER) Korona Sürecinde Göçmenler ve Mültecilerle İlgili Durum. 15.04.2020 https://korona.hasuder.org.tr/pandemi-surecinde-gocmenler-ve-multecilerle-ilgili-durum/, Accessed 22 June 2020.

HASUDER. COVID-19 Latest update on migrants and refugees. Available at https://korona.hasuder.org.tr/pandemi-surecinde-gocmenler-ve-multecilerle-ilgili-durum/, Accessed 22 October 2020.

https://www.youtube.com/watch?v=sVJqw2mP6WY&feature=youtu.be, Accessed 25 April 2020.

İltica ve Göç Araştırmaları Merkezi (İGAMDER) https://www.igamder.org/TR/covid-19, Accessed 25 April 2020.

International health regulations (2005). 3rd. ed. World Health Organization; 2016.

İzmir Bar Association, *Göç ve İltica Komisyonu İzmir Harmandali Geri Gönderme Merkezi Korona Pandemisi Raporu (18.03.2020-13.04.2020 Dönemi)*, https://www.izmirbarosu.org.tr/HaberDetay/2025/izmir-harmandali-geri-gonderme-merkezi-korona-pandemisi-raporu?fbclid=IwAR29DwDc7G5ulnF2-5RbPG9c2Seahr_5Izge8H-NpxRLHLpKjJR5NN9iwqw, Accessed 27 April 2020.

Kayı, İ., Sakarya, S, 2020. Policy analysis of suppression and mitigation strategies in the management of an outbreak through the example of COVID-19 pandemic. Infect. Dis. Clin. Microbiol. 1, 30–41.

Kamer H., Koronavirüs: Mevsimlik tarım işçileri için ne tür düzenlemeler getirildi?, https://www.bbc.com/turkce/haberler-turkiye-52196967, Accessed 27 April 2020.

Kirişçi K, Yavçan B. As COVID-19 worsens precarity for refugees, Turkey and EU must work together. Brookings Institute Order From Chaos. https://www.brookings.edu/blog/order-from-chaos/2020/06/11/as-covid-19-worsens-precarity-for-refugees-turkey-and-the-eu-must-work-together/, Accessed 21 June 2020.

Kirişçi K. & Erdoğan M.M., Turk. COVID-19: Don't forget refugees, https://www.brookings.edu/blog/order-from-chaos/2020/04/20/turkey-and-covid-19-dont-forget-refugees/, Accessed 3 May 2020.

Lane, R, 2019 Jun 22. Rebecca Katz: leading light in global health security. Lancet North Am. Ed. 393 (10190), 2483.

Mardin, F. D. (2017). *Right to Health and Access to Health Services for Syrian Refugees in Turkey*. MiReKoc Policy Brief Series. https://mirekoc.ku.edu.tr/wp-content/uploads/2016/11/PB_Right-to-Health.pdf, Accessed 3 May 2020.

Muggah, R, Katz, R., 17 Mar 2020. How cities around the world are handling COVID-19 - and why we need to measure their preparedness. World Econ. Forum. https://www.weforum.org/agenda/2020/03/how-should-cities-prepare-for-coronavirus-pandemics/.

Ministry of interior directorate general of migration management. Syrian Refugees under temporary protection, https://en.goc.gov.tr/temporary-protection27, Accessed 26 June 2020.

Ministry of interior directorate general of migration management. residence permits. https://en.goc.gov.tr/residence-permits, Accessed 23 Oct 2020.

Ministry of interior directorate general of migration management. irregular immigration. https://en.goc.gov.tr/irregular-migration, Accessed 23 Oct 2020.

Ministry of Health, Turkey's Daily Coronavirus Numbers, https://covid19.saglik.gov.tr/, Accessed 30 June 2020.

Ministry of Health. COVID-19 Situation Report September 2020. https://covid19.saglik.gov.tr/Eklenti/39035/0/covid-19-haftalik-durum-raporu-38-haftapdf.pdf?_tag1=E0AD9047A64F28BDA2A2DB03CF9C3B10B4AE487F, Accessed 23 Oct 2020.

Ministry of Interior, Directorate General of Migration Management, 07.02.2020, Uluslararası Koruma Kapsamındaki Yabancıların Genel Sağlık Sigortaları Hakkında, https://www.goc.gov.tr/uluslararasi-koruma-kapsamindaki-yabancilarin-genel-saglik-sigortalari-hakkinda, Accessed 26 April 2020.

Ministry of Health, *Pandemi Döneminde Mevsimlik Tarım İşçilerinin (MTİ) Korunmasına Yönelik Alınacak Önlemler*. https://covid19bilgi.saglik.gov.tr/depo/diger_kamu_kuruluslar/COVID19-TarimIsclerininKorunmasinaYonelikAlinacakTedbirler.pdf, Accessed 27 April 2020.

Official Gazette of the Republic of Turkey, 11/04/2013, Law on Foreigners and International Protection, no 6458, https://www.unhcr.org/tr/wp-content/uploads/sites/14/2017/04/LoFIP_ENG_DGMM_revised-2017.pdf, Accessed 3 May 2020.

Official Gazette of the Republic of Turkey, 22/10/2014, Legislation on Temporary Protection https://www.resmigazete.gov.tr/eskiler/2014/10/20141022-15-1.pdf, Accessed 26 April 2020.

Official Gazette of the Republic of Turkey, 04/11/2015, Geçici Koruma Altına Alınanlara Verilecek Sağlık Hizmetlerine Dair Esaslarda Değişiklik Yapılması, http://www.madde14.org/images/5/56/SagBakYonergeDegisiklik54567092.pdf, Accessed 26 April 2020.

Official Gazette of the Republic of Turkey 24/12/2019 30988 sayılı Bazı Kanunlarda ve 375 Sayılı kanun Hükmünde Kararnamede Değişiklik Yapılmasına Dair Kanun https://www.resmigazete.gov.tr/eskiler/2019/12/20191224-1.htm, Accessed 26 April 2020.

Official Gazette of the Republic of Turkey, 2008/13, Acil Sağlık Hizmetlerinin Sunumu Genelgesi, https://www.resmigazete.gov.tr/eskiler/2008/06/20080626-3.htm, Accessed 26 June 2020.

Official Gazette of the Republic of Turkey, 2010/16, Acil Sağlık Hizmetlerinin Sunumu Genelgesi, https://www.resmigazete.gov.tr/eskiler/2010/08/20100810-12.pdf, Accessed 26 June 2020.

Official Gazette of the Republic of Turkey, Social Insurance and General Health Insurance Act No. 5510 of 31 May 2006, https://www.resmigazete.gov.tr/eskiler/2006/06/20060616-1.htm, Accessed 3 May 2020.

Official Gazette of the Republic of Turkey, 9/04/2020, Sosyal Güvenlik Kurumu Sağlık Uygulama Tebliğinde Değişiklik Yapılmasına Dair Tebliğ, https://www.resmigazete.gov.tr/eskiler/2020/04/20200409-7.htm, Accessed 26 April 2020.

Official Gazette of the Republic of Turkey, 14/04/2020, 13/4/2020 Tarihli ve 2399 Sayılı Cumhurbaşkanı Kararının Eki, https://www.resmigazete.gov.tr/eskiler/2020/04/20200414-16.pdf, Accessed 26 April 2020.

Osmaniye'den İzmir'e getirilen mülteciler, otogarda kaderlerine terk edildi: "Paramız yok, ne yapacağımızı bilmiyoruz", https://sendika63.org/2020/04/osmaniyeden-izmire-getirilen-multeciler-otogarda-kaderlerine-terk-edildi-paramiz-yok-ye-yapacagimizi-bilmiyoruz-584021/, Accessed 23 October 2020.

Pandemi döneminde Türkiye'de göçmen ve mülteciler, https://www.dw.com/tr/pandemi-d%C3%B6neminde-t%C3%BCrkiyede-g%C3%B6%C3%A7men-ve-m%C3%BClteciler/a-53098563, Accessed 27 April 2020.

Pelek, D., 2019 Dec 1. Syrian refugees as seasonal migrant workers: re-construction of unequal power relations in Turkish agriculture. J. Refug Stud. 32 (4), 605–629.

Regional Refugee & Resilience Plan Turkey. 3RP Turkey Consolidated 2020 appeal overview. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/77350.pdf, Accessed 23 October 2020.

3RP Turkey. regional refugee resilience plan in response to the Syria Crises 2019-2020. Availabla at https://reliefweb.int/sites/reliefweb.int/files/resources/68618.pdf, Accessed 23 October 2020.

Sisk, E, 15 Oct 2020. How Syria's displaced doctors became Turkey's new workforce. Apolitical. Case Study/Health Wellbeing. https://apolitical.co/en/solution_article/syria-displaced-doctors-turkey-workforce.

Şimşek D., *Feeling of desperation is doubled due to COVID-19 among undocumented African migrants in Istanbul, Identities Blog Series COVID*, https://www.identitiesjournal.com/covid-19-blog-series/feeling-of-desperation-is-doubled-due-to-covid-19-among-undocumented-african-migrants-in-istanbul?fbclid=IwAR0Lsv5WXvdv3lwoIKfjd1oicMZk6kqjNjRvb-Eqq_FQurwTCkjjYN1uvIw, Accessed 27 April 2020.

Taskinsoy, John, A Delicate Moment in Turkey's Economic Transition: Can Turkey Survive Mounting Economic Problems without the IMF's Bailout Package? (June 22, 2019). SSRN: https://ssrn.com/abstract=3408520 or http://dx.doi.org/10.2139/ssrn.3408520, Accessed 30 June 2020.

The Turkish Statistical Institute. Press release: labour force statistics, 2019. Ankara, Turkey; 20 March 2020.

The Association for Solidarity with Asylum Seekers and Migrants (SGDD-ASAM) https://covid19.sgdd.org.tr/, Accessed 25 April 2020.

Turkish red crescent and International Federation of Red Cross and Red Crescent. Impact of COVID-19 on Refugee Populations Benefitting From the Emer-

gency Social Safety Net (ESSN) Programme. 14 May 2020 Available at https://data2.unhcr.org/en/documents/details/76274, Accessed 22 October 2020.

Tanış F., *Türkiye-Yunanistan Sınırında Neler Oldu?*, https://www.gocarastirmalaridernegi.org/tr/yayinlar/analizler/160-turkiye-yunanistan-sinirinda-neler-oldu?fbclid=IwAR1m_l3KN_5Ni9ChWimYxU_mdwfHp3iT3d71tvlwBRKBlEEbE6QKoIJRQfs, Accessed 21 October 2020.

Tekin-Koru, A, 6 April 2020. Precarious lives: Syrian Refugees in Turkey in corona times. VOX EU. Availabla at https://voxeu.org/article/precarious-lives-syrian-refugees-turkey-corona-times .

United Nations high commission for refugees, October 2019. Turk. Fact Sheet. https://www.unhcr.org/tr/wp-content/uploads/sites/14/2019/11/UNHCR-Turkey-One-Pager-Fact-Sheet-Oct2019.pdf.

Uygun, E., 2020 Jan. The Life Condition of Syrian Asylum Seekers in Turkey and the effect of these conditions on the desire to migrate to Europe. Psychiatry Investig. 17 (1), 55.

UNESCO International Bioethics Committee and World Commission on the Ethics of Scientific Knowledge and Technology. Statement on COVID-19: ethical considerations from a global perspective. document number: SHS/IBCCOMEST/ COVID-19 REV. France, 2020. https://unesdoc.unesco.org/ark:/48223/pf0000373115, Accessed 25 June 2020.

Ursu P., Nitzan D., Şener S., Bahadır S., Şimşek M., Beqiri M., Dembech M., Karaoğlan Kahiloğulları A., Malaj A.*Protracted emergency in Turkey - supporting provision of essential health services to Syrians under temporary protection*, http://www.euro.who.int/_data/assets/pdf_file/0007/364885/php-4-1-1205-emergency-turkey-eng.pdf?ua=1, Accessed 26 April 2020.

UNHCR Operational Portal Refugee Situations #COVID-19 Turkish Ministry of Health: Leaflet-Arabic. https://data2.unhcr.org/en/documents/details/74810, Accessed 02 June 2020.

UN Women. Amid COVID-19 lockdown in Turkey, UN Women runs campaign to curb violence against women and promote gender equality at home. 4 May 2020. Available at https://eca.unwomen.org/en/news/stories/2020/5/amid-covid19-lockdown-in-turkey-un-women-runs-campaign-to-curb-vaw-and-promote-gender-equality, Accessed 24 October 2020.

UNHCR, Turkey Operational Update August 2020. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/UNHCR%20Turkey%20Operational%20Update%20August%202020.pdf, Accessed 24 October 2020.

UN Women. Needs assessment of syrian women and girls under temporary protection status in Turkey. (Eds) Yücel A, Utas C, Luchsinger G, Kavlak IV, Kristjansdottir IB, Freizer S. Ankara, 2018 Available at: http://sgdd.org.tr/wp-content/uploads/2018/08/The_Needs_Assessment_ENG_WEB.pdf, Accessed 24 October 2020.

World Health Organization Coronavirus Disease (COVID-19) Dashboard https://covid19.who.int/, Accessed 30 June 2020.

Yıldız, U., 2012. Passivized Lives, Autonomous Imaginations: The Lives of Asylum-Seekers Under The Regulation of Satellite City In Turkey. (Master of Arts). International Relations, School of Social Sciences and Humanities, Koç University, İstanbul.