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Tackling COVID-19 in informal tented settlements (Lebanon): An assessment of preparedness and response plans and their impact on the health vulnerabilities of Syrian refugees



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ABSTRACT

This paper is exploring and critically accessing the nature and mechanisms of preparedness and response plans to COVID-19 in Syrian ITSs in Lebanon along with their immediate health impacts on refugees and their abilities to survive. Little is known to date about how such plans have been set up and how they have immediately impacted refugees, particularly those in countries affected by severe economic and political turbulences along with fragile health systems. This qualitative study has been conducted during the pandemic and hence is providing important and novel insights into a time-limited research window during which not only refugees' mobility was restricted but also research capabilities severely constrained. We are focusing on the relationships between refugees, health and the COVID-19 pandemic and unwrapping how very strict and control-led preventive mechanisms have emerged as a consequence of already stretched and problematic health and socio-economic systems. We are also demonstrating how the multi-level strategy and local responses have led to significant challenges to local municipalities, local NGOs and international aid agencies in order to reduce transmission risks in very unhealthy settings as they try to address wider needs. This paper concludes that the impact of the constraining preventive measures implemented to date means that refugee communities will suffer consequences for months and years to come, with their ability to survive being threatened and an expected long-term health impact for a population already at high risk of NCDs. We argue that more research will be needed into deconstructing further refugees' reactions to encampment mechanisms and mobility restrictions, particularly if survival becomes even more problematic; similarly relationships and tensions with local municipalities, as well as measures and support provided by local and international NGOs, will deserve attention. A key question remains about the likely scenario if cases start to spread widely in ITSs and, hence, what will happen to both refugees and host communities in a country with a health system on the edge of collapse.

1. Introduction

The impact and implications of the COVID-19 pandemic on people, places and economies have been overwhelming all across the globe, but particularly for the most vulnerable and those in low- and middle-income countries in their struggle for surviving the pandemic outbreak. Beyond the direct health implications caused by the virus, their vulnerability has surged due a reduction of income caused by restricted mobility and as a consequence of lockdowns and other encampment mechanisms (Wilkinson et al., 2020; Moawad and Andres, 2020, 2021). Informal economy activities are being challenged; access to informal work and food systems (Skinner and Watson, 2020) has been reduced and made more difficult. This has resulted in increased poverty and hunger with wider long-term health implications, for example in connection with

Tuberculosis (TB) in South Africa (Denoon-Stevens and du Toit, 2021). Individual situations differ significantly though, depending on the country, status and settlement settings in which vulnerable communities live. Migrants and refugees are already living in poor and unhealthy conditions (Kluge et al., 2020), either in camps or in informal tented settlements (ITSs), and their legal or illegal status affects their ability to access health services and international aid; they have found themselves in a further limbo state due to strict virus-preventive mechanisms. Having said that, little is known at this stage about how COVID-19 preparedness and response plans have been set up and how they have immediately impacted refugees, particularly those in countries affected by severe economic and political turbulences along with an already struggling health system.

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This paper is focusing on the 1.5 million Syrian refugees (as of 2019) who have been settling in Lebanon since 2011, 297,000 of whom are reported as living in ITSs (United Nations High Commissioner for Refugees (UNHCR), 2019). As the country is not a signatory of the 1951 Refugee Convention (Sanyal, 2017; Bidinger et al., 2015) the migrants are not considered as displaced or refugees. In 2014, new national regulations were set up requiring any refugee to secure a visa and obtain a residential status to be renewed annually (\$200 fee); this led to a significant financial burden for the poorer Syrians resulting in them living in the country illegally (Human Rights Watch, 2016). This situation triggered increased marginalisation (Sanyal 2017), poverty and difficulty in accessing health services, mainly provided through informal support and international aid.

Per the Ministry of Public Health (MOPH) as of the 29 November 2020, Lebanon reported over 125,000 COVID-19 cases and just under 1,000 deaths. While the country had experienced very few cases during the first wave of the global pandemic and was internationally praised for its successful though "aggressive containment approach" (El-Jardali et al., 2020), it has been more severely affected by the second wave which hit the country and spiralled downwards since the summer. Very strict lockdown measures (including curfew, closure of all public outlets and restaurants, airport, etc.) were challenged and then partially eased (including the re-opening of the airport). Lockdown measures were opposed with regard to their detrimental economic consequences in a country that is also facing one of its worst economic and political crises leading to protests and riots (Moawad and Andres, 2021). The 4th of August explosion that wreaked the eastern part of the city also led to disaster relief responses thus forcing an easing down of lockdown mechanisms (ibid). However, to date, few cases have been reported in ITSs, per se, the focus of our study.

This paper aims to unwrap and critically access the pandemic preparedness and response plans that were specifically set up for Syrian ITSs and examine their impact on refugees' health vulnerabilities and further exclusion. To do so, we first start by contextualising how the pandemic occurred in a context of both refugee and health national crisis, and then present the methodology of research. After presenting our findings on how prevention and containment of transmission mechanisms have been developed, we discuss the wider impact of encampment mechanisms and control-led preventive restrictions and identify key policy considerations.

2. The Syrian refugee health crisis

The pandemic preparedness and response plans to COVID-19 for Syrian refugees' informal tented settlements has to be situated in a pre-pandemic health crisis context. "Since the 1970s, Lebanon has endured repeated shocks to its health system, including wars, massive population displacement, economic downturns and political instability" (Ammar et al., 2016, p.1). The health crisis has, however, been deepened further in recent years with the country currently undergoing its worse economic and political crisis marked by a rapid devaluation of the Lebanese pound and unemployment soaring to 35% nationwide. This is occurring nine years after the unprecedent influx of Syrian refugees which disrupted the Lebanese demographics disproportionally (Moawad and Andres, 2020), resulting in the highest refugee density per capita in any country worldwide since 1980 (UNHCR, 2014).

The refugee crisis created "a severe shock to the health system, and threatens continuity of service delivery, destabilizing governance and limiting access to care" (Ammar et al., 2016, p.2). Sethi et al. (2017) noted that in 2016, only 56% of the funding required to tackle the health care needs of the Syrian crisis in host countries was obtained; this resulted in insufficient delivery capacity which impacted the health needs of both refugees and host communities. Now, Lebanon is characterised by an absence of universal health care and a system dominated by private health service providers (ibid). In 2015, it was noted "around 68% of the primary health care centers in the national

network are owned by NGOs while 80% of hospitals belong to the private sector" (Ammar et al., 2016, p.2).

Health care for Syrian refugees has been in part subsidized by UN-HCR; refugees, however, need to pay between 15% and 25% of the treatment costs, depending on their nature and if they are classified as vulnerable, or not (i.e. those under five years old and over 60 years of age, disabled people, pregnant women and nursing mothers or victims of torture or sexual or gender-based violence) (Blanchet et al., 2016). UNHCR has adopted a public health approach, which prioritizes affordable and accessible basic primary health and emergency care, over costlier and complex treatments and hospital care, with the aim of ensuring coverage for the greatest number of refugees. UNHCR also runs a "referral care" mechanism system for secondary and tertiary care through primary health care centres. In any case, health access and care constitute a financial burden for refugees (Ammar et al., 2016) fostering their vulnerability further, as not all their health needs can be covered. It is worth noting that Syrian refugees are at higher risk of non-communicable diseases (NCDs) due to ageing populations and lifestyles, hence with existing health conditions prior to displacement (Blanchet et al., 2016; Sethi et al., 2017). Their registration status is also interfering in their access to healthcare. Refugees with limited legal or illegal status are scared of crossing checkpoints to access healthcare facilities and thus being arrested, which deters them from seeking help (IRC and NRC, 2015).

Refugees' health vulnerability is enforced by their living conditions and an easy access to healthcare facilities. As noted by Sanyal (2017), humanitarian organizations were not given permission by the government to establish formal refugee camps for displaced Syrians. Instead, the government adopted a laissez-faire approach leading to the spread of ITSs in remote locations, like those in the Beqaa governate, an area that is central to both Beirut and Damascus and closed to the Syrian border (Moawad and Andres, 2020). Those ITSs are defined by the 2015 Lebanon Shelter Sector Strategy as an "unofficial group of temporary residential structures, often comprising of plastic-sheeting and timber structures and can be of any size from one to several hundred tents"(Sanyal, 2017, p.118). As a result, innumerable informal tented settlements have proliferated across private agricultural lands providing unhealthy living conditions related to poor hygiene and lack of access to basic health services (Yamout et al. 2014 cited by Blanchet (2016).

Indeed, ITSs are off-grid and shelters are constructed out of temporary and easily dismantled materials providing "little protection from the elements as well as limited access to basic needs such as clean water and sanitation, robust medical support, and safe and nutritious food supplies" (Kassem and Jaafar, 2020, p. 423). They do not provide adequate hygiene and disease-free environments as infections can be easily transmitted by rodents, reptiles and insects (Moawad and Andres, 2020). WASH (water, sanitation and hygiene) conditions are really poor with exposed shared pit latrines. Attempts of collection, desludging and treatment of waste and wastewater management do not meet international hygiene and safety standards, even though managed by either non-governmental organisations (NGOs) or subcontracted local agencies (ibid). ITSs present all the conditions (i.e. crowded places, impossible to socially distance, no good access to medical support and sanitation) that allow the spread of COVID-19 (Kassem and Jaafar, 2020). In such a context, they have been considered as high-risk places requiring dedicated pandemic preparedness and response plans. This paper focuses on such plans and assesses their impact.

3. Methodology

This paper has been constructed out of a qualitative research design comprising the collection of both primary and secondary data. It has been developed out of two datasets: a large-scale study, completed a month prior to the country entering into lockdown in March 2020 and used here as the control dataset, and a smaller-scale research, undertaken during the pandemic outbreak. The first study included 58 interviews conducted with representatives from national governments,

host communities, international non-governmental organisations (IN-GOs) and NGOs, along with 107 interviews with refugees in two ITSs in the Bekaa region between October 2019 and February 2020. It looked, amongst other themes, at refugees' living conditions (including health), control, support and governance mechanisms. This dataset is here used as the underpinning control data serving as comparison with the new data collected during the pandemic (August to October 2020), constructed upon a smaller but highly selective sample and with a focus on the impact of COVID-19. This large-scale study allowed us to identify 15 high-level 'knowledge' holders representatives able to provide an overarching view on ITSs and pandemic preparedness and response plans across the country. The roles and responsibilities of those interviewees provided them with crucial information about preventive and treatment measures taken towards the pandemic and in support of refugees along with insights into their everyday living conditions, behaviours and reactions. It is important to note that access to the ITSs was not authorised, due to national and local municipal restrictions along with the ethical underpinnings of this study.

As noted the 15 participants were carefully selected based upon their knowledge of the research topic and were identified via existing contacts in the field, from the large-scale research, and recommendations. NGO participants were selected as being representative of an active organization directly involved in the implementation of preparedness plans and provision of international aid. Government officials were identified for their role in developing and implementing local and national preventive plans and measures towards ITSs and host communities. Refugee representatives and individuals representing organizations delivering specific services or supplies to refugees were selected for their ability to provide insights into the refugees' everyday living conditions and needs, whereas host community representatives had expertise on how the pandemic plan was implemented and delivered both inside and outside of some ITSs. This collection of primary data was complemented with a thorough desk-based collection and review of national and local plans and strategies developed and published from March 2020 by governmental bodies along with the United Nations (UN) and NGOs.

This COVID-19-led project aimed to understand the measures taken in line with the pandemic and their impact on the perception and vulnerabilities of Syrian refugees; it also assessed the wider impact of mobility restrictions enforced by local municipalities on refugees' ability to cope (access to food, informal jobs, health services etc.). All interviews were run online on a one-to-one basis, either in English or in Arabic. Themes for questioning included interviewees' roles and duties in regard to ITSs, refugees and the COVID-19 pandemic; the different types of encampment, lockdown and quarantine mechanisms set up, their nature, length and rationales used to justify them; how refugees have been perceived during the pandemic; how refugees' vulnerabilities have increased due to mobility restrictions and how they access information; and lessons emerging at different levels, community to city and national levels.

Once approval was secured from participants all interviews were recorded, then transcribed and coded, using a two-staged approach involving both manual coding (first stage) and the use of the software NVivo (second stage). The coding was undertaken by one of the coauthors in order to ensure consistency following a framework put in place and then sense-checked by both investigators. Due to the small number of interviews and the time-limited nature of the research, we decided to assess the quality and representativeness of the data by undergoing a first stage of manual coding. This allowed us to identify a range of recurrent themes and sub-themes. After the first 7 interviews we observed that no new themes were emerging, meaning that we were possibly reaching saturation. We however continued the manual coding which confirmed this preliminary observation. In line with the analytical process used with our large-scale control database we decided to code those 15 interviews using NVivo. A total of 13 codes were used, with a further eight codes emerging during the data analysis, aligned with the themes and sub-themes identified during the manual coding process. We followed a reverse order to code the interviews (starting from the last 8 manually coded) and again, we reached saturation after the first seven interviews. Due to the narrow focus of the research, rapid saturation was considered as acceptable, noting that Ando et al., (2014) demonstrated reaching saturation after 12 coded interviews out of 39 interviews conducted in their larger-scale study. The following particularly significant themes emerged: the encampment process, control mechanisms, health preventive measures, provision of aid, leadership, access and mobility, along with fear. These led us to consider questions around how pandemic preparedness and response plans were set up, implemented and with what consequences on refugees and host communities. To analyse the data, an interpretative approach was adopted, focusing on unwrapping our interviewees' detailed lived experiences and knowledge about the research themes and contrast them with COVID-19 specific secondary sources (recent academic papers, policy documents and reports). Emerging results were cross-checked and compared with thematically relevant data collected in the large-scale research in order to identify differences and similar patterns and hence account for results specifically derived from the pandemic.

Ethical approval was granted by University College London (UCL) Research Ethics Committee on 3rd July 2020. Participation was entirely voluntary and no incentives were used to facilitate the discussion. A participant information sheet along with a consent form were provided and obtained from each participant. Interviewees' names have been fully anonymised to guarantee full anonymity.

4. Findings

4.1. A multi-level response and multi-sector coordination

The Lebanese government responded to the global pandemic crisis and established a national Covid-19 task force advocating and implementing a multi-sector coordination with UN agencies, local NGOs and local municipalities. The national response is based on devolution, including financial devolution in a context of sparse resources. Such coordination lacked a needed rapid response in being set up and led to delays in preparing quarantine and isolation centres. However, cases did not spread quickly due to a range of supplemental localised preventive mechanisms, including raising awareness and strict encampment mechanisms. As such, interviewees agreed that the response has been "rather successful till now", despite "vague governmental procedures", as stated by one of the government representatives (n°4) interviewed on 25 September 2020. The National Action Plan Against Coronavirus (COVID-19), published in April 2020, is presented as a holistic approach conducted "to prevent infection, save lives, reduce risks, and ensure an effective response" (Disaster Risk Management Unit, 2020, p.4) in parallel to the action plans of governorates and municipalities. Local governments are expected to "provide appropriate places suitable for quarantining to isolate suspect and virus-infected persons who are not in need of medical attention and also protect the most vulnerable populations, including refugees, foreigners, women, children, and people with special needs and disabilities" (ibid).

The response plan in cases of suspected and identified cases has also been developed as multi-level. As noted by the same government representative:

"it starts with a call from UNHCR to MOHE [Ministry of Health], which dispatches and activates an established operational cell (formed by members from MOSA [Ministry of Social Affairs], MOI [Ministry of Interior], UN entities, NGOS and local partners) to assess which level is the case/cases. Once this is assessed the matter would be transferred to the RRT [Rapid Response Team]; up to 70 teams have been geographically established and distributed. The RRT team will go on site and evaluate the ITS in question and evaluate which mechanism is needed i.e. a lockdown, a quarantine, other. Once this is done the MOI will report to the governor, municipality and armed forces to act on the ground either by

enforcing a lockdown or monitoring quarantine put in place" (n^4 , 25 September 2020).

While national and local governments have been providing the framework and control mechanisms towards refugees in ITSs, field actions including preventive measures, containment of transmission and treatment strategies have been set up to co-jointly be led and implemented by UNHCR and UNICEF with additional quarantine and isolation guidance. The latter has four constellations that stretch from micro-level (household level and community level) to a macro-level (area/municipal level and full quarantine) and are carefully depicted based on risk of infections and confirmed cases. Support at community level, beyond awareness and education campaigns (discussed hereafter) has included the mobilisation of refugees with medical background who received training on isolation procedure, the creation of community groups dedicated to isolation procedures and the provision of medical support (e.g. Personal Protective Equipment, medicines, additional beds, ventilators and other advanced equipment) and food support.

It is worth noting that the establishment of quarantine centres and collective isolation sites, especially in remote and deprived locations, as such, has been difficult. They have been delayed significantly due to a lack of financial resources, of insufficiently equipped facilities and due to the complexity of the coordination efforts with the Ministry of Health. Some centres built by UNHCR and submitted for approval to the Lebanese government were not approved, as it was noted that these facilities were either abandoned structures or were already devised for medical use.

5. Prevention and awareness

A crucial aspect of the response plan has been the preventive actions based on awareness and education led by NGOs and specifically UN organisations inside ITSs. They were of different natures.

First, prevention included deep disinfection and fumigation of ITSs at the start of the pandemic followed by quarantine to ensure that no cases were detected. Humanitarian agencies distributed hygiene kits, disinfectants, soap, water and masks. It is worth noting, as we will discuss later, that criticisms were made about the quantities distributed and how resources reached refugees fairly. Health monitoring was also conducted by Refugee Outreach Volunteers. Government representatives stressed how important such arrangements were: those groups were "formed by a few members from the ITSs with a role to take/check refugees' temperature; they were provided with digital thermometers", as noted by government representative no. 4, on 25 September 2020.

Second, important communication efforts at the start of the pandemic were conducted about the nature and severity of the virus (including symptoms and transmission), hygiene awareness and prevention methods (social distancing, wearing masks, washing hands), diagnostic and treatment procedures, government instructions on movements and curfew and self-isolation procedures (UNHCR, 2020b). Communication was spread through a range of social media means and particularly WhatsApp phone application, as stressed recurrently during our interviews, along with the distribution of printed flyers. Other communication means simultaneously targeted host communities, as stated by one government representative: "cars and ambulances with installed speakers were roaming the streets calling for precautions. The minarets of local mosques were also used to address both refugees and host communities in explaining the measures on how to prevent viral spread" (government representative no. 2, 12 August 2020).

Now, educating refugees about the virus and training them about preventive measures was crucial as a range of factors was hindering their understanding of the gravity of the situation. As noted by an NGO representative (no. 2) on 6 October 2020: "At first it was hard because in their culture, they don't believe such stories. To them everything is a lie and it just doesn't exist. But after we put in so much time and effort to explain to them the situation, they started accepting it. Especially after hearing of

many cases and deaths". A key issue to tackle was refugees' isolation and unequal means to access communication. A representative from the host community in the Bekaa region noted that "at first they were not aware. They didn't believe in this virus. They used to say that what they lived is far worse and it would not affect them" (host community representative no. 1, 02 September 2020). Shifts in perception occurred progressively through those preventive campaigns enforced by severe encampment mechanisms.

5.1. Encampment, control and mobility restrictions

The multi-level response led by the government was in line with World Health Organization (WHO) guidance overall; however, social distancing and home isolation is obviously unfeasible in ITSs, which are thus perceived as a major health risk. As a result, localised preventive measures were implemented with a very strict control of not only refugees but also host communities' mobility. This included both curfews (a common practice, prior to the pandemic) and localised lockdowns. Again, the approach was multi-level, as explained by one representative from the host community:

"The governmental entities made the municipalities ensure that the camps are in full lockdown. The Minister of Internal Affairs would issue a statement that people cannot go in or out of camps. NGOs would tell their volunteers that they cannot enter the camps. The governmental entities in turn informed the Shaweesh [i.e. the refugee in charge of the camp], of such regulations. And he would tell the refugees about this because he was held responsible" (host community representative n°1, 02 September 2020).

Municipalities, NGOs and the Lebanese army achieved enforcement. This was acknowledged by several refugee representatives and suppliers, including refugee representative/supplier no. 2 interviewed on 22 September 2020 who pointed out that "they closed the camps and took all necessary precautions on people who enter and leave the camps to avoid the spread of the coronavirus".

As we note (Moawad and Andres, 2021), once ITSs were confirmed as case-free, after quarantine, encampment measures remained mainly in place and, in some cases, were partially eased down. Restrictions of mobility included additional curfews significantly limiting movements out of the camps, controlled mobility for those allowed to exist/enter, continuous patrolling and monitoring, and night guards. Some ITSs remained in full lockdown. In this configuration, one person from each settlement (the Shaweesh) was assigned with the responsibility of buying goods for the camp while the rest of the settlement population was prohibited from exiting (Hodali, 2020). Shaweeshs were also in charge of monitoring movements in the camps. This was noted by a third of our interviewees including refugee representative/ supplier n°1 who stated that "No one can go about without telling me. There are children and people at stake. Before the coronavirus we could do that, now no" (15 September 2020).

Refugees' dependence on international aid increased further as supplies of food and medicine were provided by NGOs. Such continuous and forced lockdowns were not legally bounded but constructed upon coercion and policing. One of the government representatives explained that "the municipality police would always go around the camps and tell them not to go out at all, not even in hours that is acceptable by law. Additionally, the purpose of these checkpoints was to stop the migration of Syrians from one area to another" (government representative no. 1, 06 October 2020). Policing was severe as stated by another government representative: "a fine was imposed if a refugee was seen strolling outside of 50,000 LBP [Lebanese pound, circa £25 as of November 2020 per the official BDL (Banque du Liban) rate], and an enforced 14 days' quarantine" (government representative no. 3, 09 September 2020). In other ITSs, mobility restrictions within the municipality area (and not beyond) were eased down a little, for example allowing refugees to exit the camp between 9:00 am and 1:00 pm (Moawad and Andres, 2021). The area was, however, locked at a larger scale. One of the host community representatives observed "there were many checkpoints to stop visitors coming from other towns for our sake and the sake of the camps" (host community representative n°1, 02 September 2020). In other words, no external person was allowed in the area and refugees could exit only to go and work locally (with limited hours). However, he continued: "they did not go out of the camp for more than work so they didn't mix with people. They were scared for their families" (ibid). Additional health preventive measures outside of the municipality were also implemented, and beyond the disinfection of the camps, some municipalities started disinfecting the streets, cars and monitoring any incomers: at the checkpoints around the town, tyres were disinfected along with digital forehead temperatures taken, as observed by several of our interviewees.

Targeted communication was also key again to all the coercive measures set up to ensure compliance; this was constructed upon a 'culture of fear' about the virus which is visible in the strategy used and disclosed by one of the community representatives we interviewed:

"We explained to the refugees that you couldn't go out because if one of you catches this virus he or she will transmit it to the entire camp, that it is a very dangerous virus with serious symptoms. They were convinced. [...] We explained to them that if we allow them to go out of the camp, we could not be sure that all necessary precautions were being practised to stop the spread of the virus. We are all living in close proximity to each other" (host community representative n°2, 02 September 2020).

Such restriction of mobility and increase of fear raises great concern about the longer-term consequences on refugees' de-facto exclusion along with the potential adverse impact on their everyday survival abilities.

5.2. Consequences of the COVID-19 pandemic on refugees' ability to survive

Reflecting upon the consequences of the pandemic and its restrictions on refugees, it is clear that COVID-19 has been significantly affecting their ability to survive and hence increase their health vulnerabilities.

First, whereas opportunities for both legal and informal work had already started to shrink prior to the pandemic due to national restrictions, working, in many areas, has become mostly impossible due to encampment measures. This was shared and mentioned as a crucial issue by two of the ITSs refugees' representatives/ suppliers, including representative no. 1 interviewed on 15 September 2020: "In my opinion, we need NGOs to help the people. Some people do not have bread. We used to work before daily, but now there is no work at all [...] We need aid and work to be able to live. We need to be able to feed the families".

Second, refugees are experiencing an increase of their living costs, with daily products and essential commodities becoming more expensive to purchase due to the ongoing economic crisis in the country and the new need to purchase hygiene and sanitation products in addition to everyday food supplies. Two-third of the NGOs and refugee representatives/suppliers we interviewed highlighted this great concern which was explained in detail by one of the refugee representatives/suppliers: "Before the UN would provide aid around 700,000 LBP to each family, what does it do now?; barely provide bread to the family. It is not enough. People are living in very bad conditions now. [...] Today we buy the masks and gloves at our own cost: 7000 LBP for gloves, which is what they make in one day. Chicken is for 11,000 LBP; our families need to eat, some families haven't eaten other than bread for two months" (refugee representative/ suppliers no. 1, 15 September 2020). One of the key challenges is the difficulty for international aid to step in to fill these gaps. The quantity of goods and hygienic products provided is insufficient, as quantities have been reduced and have to be spread more widely as more people are in need (including host communities). This finding came as a recurrent issue in the three-fourth of our sample; this converges with Kassem and Jaafar (2020, p.426) who point out that "much needed assistance (medicine, food, hygienic material, clean water) is likely to be less available to the refugees. [...] Yet the great number of refugees and their diverse needs already strain the available resources, so current efforts remain limited and fraught with difficulties. While UNHCR (2020) has called for more funding, global economic challenges might hinder a timely acquisition of funds".

5.3. Overall assessment

Building upon those initial results, caution is required in assessing the success, or not, of the multi-level preparedness and response plans and the work accomplished in the field by NGOs and municipalities. For sure, it led to very few cases reported in ITSs to date, whereas the virus spread in local towns. Government, NGOs and refugee representative/ suppliers shared similar view in that respect. One of the refugee representative/ suppliers specifically noted that "The multi-sectoral response was well synchronized. The municipalities and NGOs and ministries involved were all putting in the effort to keep it under control and any suspected cases were directly approached. The Shaweesh plays an essential role" (refugee representative/suppliers no. 2, 22 September 2020). Strict encampment mechanisms and surveillance played a key role in containing the risk of infection as delays experienced in the establishment of isolation centres due to the centralised approval process could have been detrimental if cases had spread. The culture of fear that was spread in the ITSs along with efficient awareness campaigns, combined with strict mobility restrictions, meant that refugees complied with the rules and isolated themselves from the rest of the population (Moawad and Andres, 2021). Several interviewees concurred in arguing that Syrian refugees complied with rules better than the rest of the population, including for example one of the refugee representatives/suppliers who expressed that "From what I can tell you, Syrians in the camps were more disciplined than the Lebanese people. They understood the situation and the need for social distancing" (refugee representative/supplier no. 2, 22 September 2020).

To date, refugees' compliance with having their mobility restricted has relied on having just enough food and cleaning products, but interviewees have criticised the dwindling supplies entering the settlements, hence making survival more difficult. While the country's economic crisis is deepening, less help is expected to be available from local municipalities and local NGOs and more pressure put on international aid agencies that again are financially constrained. As noted by one of the refugee representatives/suppliers (no. 3, 17 August 2020):

"we have a lack in almost everything, food, gas... the UN and the Lebanese government must provide help. They need aid in everything to make sure that this virus is not transmitted. If you do not provide people with their needs, they will go out to get supplies on their own and so might risk coming in contact with people who carry the virus or might transmit the virus which does not, in turn, help control the spread. If there are NGOs that provide food and sanitizers and medicines, milk and diapers... these need to be provided to stop the spread of this virus".

Finally, it is worth stressing that the numbers of cases identified in ITSs need to be viewed with caution and may not be fully accurate. Due to a lack of resources there is no symptomatic testing in place and some refugees may still try to refrain from reporting symptoms due to being unregistered (Kassem and Jaafar, 2020). Hence the low reported number of cases might hide more unreported cases which could lead to a major crisis.

6. Discussion

Overall, the delivery and implementation of the national response towards the pandemic in ITSs was very similar to the overall approach towards Syrian refugees settling in such informal settings in Lebanon. It relies upon a devolved approach within which local municipalities and NGOs are the ones in charge of implementing effective preventive and response plans and providing the necessary everyday support to those communities. Some voices have been elevated to argue that the national government "has hardly addressed the fate of refugees in the disruptive pandemic, or included them in any of its policy priorities" (Fakhoury, 2020, n.p.). Actions in the field and led by local stakeholders, particularly local and international NGOs, have been crucial. As such what could be perceived as a relative success, as of November 2020, "should not be credited to the forcefully imposed governmental lockdowns on these ITSs. It has been achieved thanks to the continuous INGOs support who have developed localised approaches putting the refugees' needs and practices first, along with the settings within which they sit" (Moawad and Andres, 2020, p.5).

As such it is far too early to conclude that the pandemic preparedness and response plan were relatively successful in keeping COVID-19 outside of the ITSs, not only because the second wave is not over but also because infection rates are starting to rise quickly and steadily, leading to a new national lockdown mid-November. The severity of the situation was noted by the Lebanese prime minister when he announced his decision: "Today, we have reached the red line in the number of infections, and we have reached the stage of extreme danger in light of the inability of government and private hospitals to receive critical cases. [...] We are afraid that we will reach a stage where people die in the streets in the absence of places in hospitals to treat the injured, or that there is a trade-off between one person and another" (BBC, 2020).

Now, though cases have remained limited, the consequences of the COVID-19 pandemic on Syrian refugees is major, especially in terms of its wider health consequences. The mobility restrictions of refugees coupled with their legal/illegal status mean that non-COVID-19 health conditions are not being given the attention they deserve. The Lebanese national plan relies on a Covid-19 self-reporting approach (Human Rights Watch, 2020) and the pre-Covid-19 legal measures imposed on Syrian refugees potentially present a common challenge preventing refugees from coming forward if feeling symptomatic. They also cause difficulties for hospitals in how they deal with undocumented refugees and for the security forces in how they enforce arrests and deportation. The state of national emergency introduced in Lebanon during the pandemic has been complicating access to health services further: refugees' "right to access hospitals in times of national emergencies is ill-defined and disputed. No consistent legal or policy codes guide their access to services, and often, informal actors, whether landlords, landowners, or influential power brokers, facilitate or bar their access to local services" (Fakhoury, 2020, n.p.). This is a major risk with immediate and longterm consequences, especially if infection rates continue to increase.

As Kassem and Jaafar (2020, p.426) note, "efforts should be directed to building trust relationships to allow the refugees to report potential COVID-19 cases without fear of repercussions". Now, issues of access are complicated by the fear of getting outside of the camp and catching the virus. Exasperated by difficulties in accessing medicines, which is an increasing issue in the country, refugees' existing health conditions are impacted. Furthermore, though mental support is provided by the UN and NGOs, the impact of isolation and further loss of hope has been noted amongst the youngest generations (Danish Refugee Council, 2020). Hence, though there is very little data to date on wider COVID-related mental health issues, it can be assumed that they will be significant as a result of further restrictions towards individual freedom, lack of life perspectives and a culture of fear for the other that peaked further during the pandemic (Moawad and Andres, 2021), especially as the economic crisis is deepening in the country.

Overall, it is apparent that the pandemic is significantly increasing refugees' economic, social and health vulnerabilities. In 2019, the Vulnerability Assessment Syrian Refugees (VASyR) report (a joint report yearly published between the Lebanese government and NGOS assessing the vulnerability of Syrian refugees across all sectors) found that more than half of Syrian refugees were unable to meet the survival needs of food, health, and shelter, with 73% still below the poverty line, while 93 percent of households are in debt, demonstrating a con-

sistent lack of resources for everyday needs (VASyR, 2019). It can be expected that these figures will worsen further. As it stands, "Syrian refugees face even greater challenges in earning a livelihood, covering basic needs" (UNHCR, 2020b, p.2). It is apparent that COVID-19 will lead to longer-term deterioration of refugees' health conditions due to their heavy reliance on international aid which, as demonstrated in our research, is not enough to ensure households' survivals, and particularly access to nutrient-rich foods (Kassem and Jaafar, 2020).

In the current Lebanese crisis involving health, refugees, the economy and politics, the refugees' ability to survive is going to be increasingly tested; they will be marginalized and further excluded in a context where local Lebanese populations' impoverishment and vulnerabilities are concomitantly expanding (UNHCR, 2020b). Tensions are emerging within local municipalities as refugees still tend to receive more help and support than host communities. From now on, the ability to keep the virus from spreading inside the ITSs is crucial as "the combination of pre-existing strains on the systems and the COVID-19 impact means systems are overburdened" (ibid, p.2). The overall situation is highly problematic, alarming and potentially explosive. Research in the months to come will be needed to keep monitoring the situation and assessing the forthcoming impact of the pandemic on refugees, healthcare systems, local and international NGOs and host communities.

7. Strengths and limitations

This study has been conducted during the pandemic and hence is providing important and novel insights into a time-limited research window during which not only refugees' mobility was restricted but also research capabilities severely constrained. This is the first contribution of its sort; it hence brings a very valuable contribution in the understanding of COVID-19 and migration in the context of refugees living in ITSs, at a time where there is still very little cases officially reported in ITSs. Though the Lebanese context is characterised by several unique characteristics, it is expected that wider comparative lessons will be drawn on the impact of such preparedness and response plans in other countries (e.g. Jordan or Turkey). We acknowledge that results are drawn out of a relatively narrow sample of carefully selected interviewees and a limited time period. We also note that access to camps and hence refugees during that time weren't possible due to stringent lockdowns. The views and voices of refugees are solely heard through their representatives and not directly. As such, more research will be needed into deconstructing further refugees' reactions to encampment mechanisms and mobility restrictions, particularly if survival becomes even more problematic; similarly, relationships and tensions with local municipalities, as well as measures and support provided by local and international NGOs, will deserve attention. A key question remains about the likely scenario if cases start to spread in ITSs and, hence, what will happen to both refugees and host communities in a country with a health system on the edge of collapse.

8. Policy recommendations

Several policy recommendations can be drawn out of this study, particularly towards international aids agencies and the wider global community to avoid a new humanitarian crisis. The relative success in keeping infection rates at a very low level in ITSs has relied on significant human and financial investments from both international and local NGOs as well as local governments and host communities. It is crucial that such investments are sustained but also that allocation of resources is re-assessed, with quantities increased and distributed fairly to both refugees and host communities (this includes food, medicine and sanitation products). We suggest developing more systematic approaches towards virus containment and prevention that doesn't dissociate ITSs from the host communities. The pandemic has equally affected both and further tensions, stigmatisation and marginalisation will occur if

this isn't addressed. The country is currently at a turning point, economically and politically, and trust towards the ability of the State to assist and manage the pandemic won't be restored for long hence localised approaches are needed to ensure resiliency and survival. We recently called for community/refugee-led local responses (Moawad and Andres, 2020) to address the failures of a very hierarchical and bureaucratic process and emphasised the role of local stakeholders who on a daily basis have been acting to prevent the spread of the virus. From a health perspective, such approaches can include health-led design approaches, tackling both well-being and disease-free environments, to deliver micro-level changes (ibid). This is the final recommendation that can be drawn out of our study and the wider pandemic: the importance of awareness and education in containing the virus outbreak and hence empowering refugees in measures promoting prevention, good sanitation and self-reliance. Of course, on one hand, it led to a culture of fear but, on the other hand, it also allowed the development of significant new knowledge and skills which will be hopefully sustainable and are transferable, when new pandemic episodes or health crisis occur. This is a very small win in a very gloomy context but denotes the fundamental role of localised health approaches in tackling the COVID-19 pandemic and its wider health impact on refugee communities.

9. Conclusion

In this paper we have aimed to contextualise and understand the nature and mechanisms of preparedness and response plans to COVID-19 in Syrian ITSs along with their immediate health impacts on refugees and their abilities to survive. We have focused on the relationships between refugees, health and the COVID-19 pandemic and unwrapped how very strict and control-led preventive mechanisms have emerged as a consequence of already stretched and problematic health and socioeconomic systems. We have shown how the multi-level strategy and local responses have led to significant challenges to local municipalities, local NGOs and international aid agencies in order to reduce transmission risks in very unhealthy settings as they try to address wider needs. The impact of the constraining preventive measures implemented to date means that refugee communities will suffer consequences for months and years to come, with their ability of survival being threatened with an expected long-term health impact for a population already at high risk of NCDs. To the COVID-19 crisis, another health and humanitarian crisis may thus arise leading to an unstoppable whirlwind.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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