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Urban refugees in Nairobi

Tackling barriers to accessing housing, services and infrastructure

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Men, women and children who are forced to flee their homes often bear the mental or physical scars of conflict. Refugees' arduous journeys to urban areas and the conditions they encounter there can present further health challenges. In our study of refugees living in the Kenyan capital, participants named adequate healthcare and housing as essential needs that they struggle to meet. Many face significant obstacles to accessing healthcare, including cost, lack of documentation and language barriers. Living conditions are a linked concern: overcrowded housing with inadequate water, sanitation and energy can negatively affect refugees' health. With unknown numbers of refugees living in Nairobi's informal settlements and other low-income areas, conflict with host communities is also a well-being issue. This paper discusses the need to reduce conflict and dismantle the barriers that prevent urban refugees accessing the healthcare, housing and infrastructure they need.

Contents

Acronyms

APHRC	African Population and Health Research Center
DRA	Department of Refugee Affairs
DRC	Democratic Republic of the Congo
FGD	Focus group discussion
LPG	Liquefied petroleum gas
NCCK	National Council of Churches in Kenya
NGOs	Non-governmental organisations
NHIF	National Health Insurance Fund
NUHDSS	Nairobi Urban Health and Demographic Surveillance System
RAS	Refugee Affairs Secretariat, Nairobi
RSD	Refugee status determination
UN	United Nations
VIP	Ventilated improved pit latrine

Summary

Worldwide, most refugees now live in urban areas (Gaynor 2018). But despite this, many policymakers continue to focus on camp situations, leaving the challenges of urban refugees overlooked. Kenya's national refugee policy, introduced in the 1990s, requires all refugees to stay in camps (Goitom 2016). Asylum seekers and refugees in urban areas are expected to relocate to camps, although this both constrains their mobility and makes it difficult to access employment.

But Kenya's camp-centred refugee policy can be difficult to enforce, especially when unregistered refugees arrive directly in urban areas. In 2018, Kenya's official numbers indicated that of the country's 470,088 registered refugees and asylum seekers, just 74,845 were living in urban areas (70,000 of those in Nairobi) (UNHCR 2018). However, it is widely believed that many unregistered refugees also live in Nairobi, meaning that a greater number of people need support than official numbers suggest.

Kenya's 2014 law made it a criminal offence for refugees to reside outside of the camps without official permission. Changes to how refugees register and receive official refugee status in the country have created confusion among both refugees and the responsible agencies in Kenya. There are lengthy delays and multiple documents issued to refugees as proof of their registration. These barriers have left some refugees without any official documentation, which can negatively affect access to vital services such as healthcare (NRC and IHRC 2017).

As the headquarters of most refugee agencies in Kenya, the city attracts many hoping for assistance from these agencies. Consequently, Nairobi's refugee population is considerable. However, research still mainly focuses on issues relating to their livelihoods and legal status. Access to healthcare, housing and infrastructure are neglected. Past literature also tends to overlook shared challenges between urban refugees and host communities, who may sometimes overlap. Both groups may experience low-quality shelter and pervasive poverty. There is a need to rethink urban displacement, gather more detailed data and engage with local authorities to address the specific needs of these populations (Walnycki 2019; Earle 2019).

About the research

In this study, we aimed to analyse Nairobi refugees' access to healthcare, housing, infrastructure and services and explore ways to foster inclusive healthcare systems and equitable shelter provision. Our specific objectives were to:

- Assess key health challenges facing newly arrived and longer-term refugees in urban areas.
- Assess refugee access to shelter and vital infrastructure and services, including water, sanitation and energy.
- Compare health-seeking practices and barriers faced by recent and longer-term refugees.
- Conduct secondary data analysis to compare refugee access to healthcare, shelter and other vital infrastructure and services with that of residents in Nairobi's informal settlements.

We worked with refugee community representatives to identify refugee households and collected primary data using focus group discussions, interviews and a cross-sectional household survey with refugees in Nairobi. From June to August 2018, we conducted household surveys in three of Nairobi's low-income neighbourhoods with high concentrations of refugees as follows:

- Eastleigh, with predominantly Somali, Ethiopian, and Eritrean refugees
- Kawangware, with refugees from South Sudan and Congo
- Umoja/Kayole, with refugees from Congo Brazzaville, Democratic Republic of the Congo (DRC), Burundi and Rwanda.

Refugee representatives helped to identify households and guided the data-collection teams. The sampling was selective (we interviewed individuals who self-identified as refugees) and sought to interview up to three households within the same block and from different floors in high-rise buildings. Researchers also held focus group discussions with refugees and interviewed key agencies serving urban refugees.

In the analysis, we categorised refugee nationalities based on shared ethnic/cultural backgrounds from the following countries: Democratic Republic of the Congo (DRC) and Congo-Brazzaville, Rwanda and Burundi, Ethiopia and Eritrea, and Uganda, Sudan and South Sudan. For the secondary data analysis comparing refugees with residents of informal settlements, we used findings from the Nairobi Urban Health and Demographic Surveillance System (NUHDSS). This longitudinal study follows the entire population residing in Nairobi's Korogocho and Viwandani slums.

Key findings

Access to healthcare is a key need for refugees, particularly considering their vulnerability in their country of origin and their often-perilous journeys to Nairobi. The drivers of displacement, especially war/conflict, often negatively affect healthcare provision. Even when they manage to access healthcare in Nairobi, refugees often face various challenges such as high costs, lack of health insurance (including the National Health Insurance Fund or NHIF card), lack of documentation and language barriers. Given the near absence of public health facilities in areas where refugees live, the private sector typically becomes their go-to provider. Public facilities can offer free or low-cost services, but private for-profit facilities charge higher user fees, leading those who cannot afford such services to look elsewhere for healthcare (including shops and traditional herbalists). And although some refugees can access services from agencies operating in Nairobi, these services are often only offered for a short duration.

Housing is also critical given its impacts on health and well-being (Krieger and Higgins 2002) and many refugees cannot access adequate, safe housing or clean energy. In the study communities, respondents frequently occupied crowded, single-room houses with inadequate infrastructure. Given the large number of occupants and unclean energy provision, many respondents experienced congested living conditions, an elevated risk of infectious disease transmission, and indoor air pollution. Other concerns included access to safe drinking water, both among refugees and particularly for residents of informal settlements.

Importantly, our analysis of secondary data has highlighted that refugees' shelter and infrastructure challenges often resemble those facing residents of informal settlements. Slum dwellers in Nairobi face elevated levels of poverty, few formal livelihood opportunities, and a lack of access to key services and infrastructure.

In conclusion, Nairobi's refugees face several overlapping challenges in accessing shelter, infrastructure and healthcare. But there are also differences between refugee communities. Kenyan restrictions on refugees' engagement in formal work have meant that many cannot meaningfully contribute to the local economy, nor can they foster their households' health and well-being. There is therefore a need for the government to reconsider the work restrictions policy that helps to place refugee households in precarious situations. Furthermore, the disadvantages faced by new arrivals and refugees with different countries of origin underscore the need for targeted programmes to reduce disparities between them and to foster more inclusive urban trajectories.

Policy and programme recommendations

Despite Kenya's restrictive policy of encampment, it is likely that many of its refugees will continue living in urban areas to avoid the camps (either by directly moving into cities or leaving the camps to reside in cities). Several policy implications arise from the findings of this study.

- Kenya's government should review its encampment policy and work restrictions, which have resulted in low-paid work and precarious shelter for urban refugees. It should encourage formal livelihoods, generating benefits for refugees' health and well-being.
- Kenyan authorities need to address the various barriers to health service access, including cost, documentation and language.
- Kenyan authorities must tackle inadequate, overcrowded housing and lack of services in low-income neighbourhoods to improve the health and well-being of refugees; local residents would benefit from the same improvements.
- To foster peaceful relations between host communities and refugees, policymakers can engage and empower refugees' groups and community organisations to work together, particularly those already active in Nairobi.

1

Barriers to accessing services and infrastructure for urban refugees

1.1 Background

Today's refugees are more likely to be found in urban areas, where they face an array of barriers to housing and services, discrimination and other threats to their well-being. Estimates from the Office of the United Nations High Commissioner for Refugees (UNHCR) indicate that 58 per cent of the world's 25.4 million refugees reside in urban areas, while the rest are in camps and in rural areas (UNHCR 2017). As of November 2018, Kenya was home to an estimated 470,088 registered refugees and asylum seekers, a decline from the 2015 estimate of 584,989 (likely due to voluntary return to country of origin of Somali and South Sudanese refugees). In this same year, the estimated total number of registered refugees and asylum seekers in urban areas stood at 74,845, with 69,996 registered in Nairobi (UNHCR 2018a). Despite their substantial numbers, many refugees in Kenya's urban areas are unregistered, and their complex challenges are often overlooked.

All refugees in Kenya are issued with a refugee identity card (for adults) or pass (for children below 18 years). But many refugees struggle to access work permits. Article 16 of the Refugees Act spells out the rights and duties of refugees in Kenya, with Section 4 indicating that all refugees and members of their families are subject to the same restrictions imposed on non-citizens with respect to wage-earning employment (National Council for Law Reporting 2006).[1] This means that for refugees to legally work in Kenya, they need to apply for and obtain a work permit. They are also eligible for a Class M work permit that allows them to engage in wage employment or business (Department of Immigration Services 2015). However, operationalising this is difficult, and many skilled refugees have been unable to get a work permit.

In 2014, Kenya's refugee policy was formally changed. In the 1980s, it was less restrictive: refugees were free to live and work anywhere in the country (NRC and IHRC 2017). The current encampment policy was initiated in 1991, when Kenya began receiving massive numbers of Somali refugees after the collapse

[1] According to Article 11 of the Refugees Act (National Council for Law Reporting 2006), 'Any person who has entered Kenya, whether lawfully or otherwise and wishes to remain within Kenya as a refugee in terms of this Act shall make his intentions known by appearing in person before the Commissioner immediately upon his entry or, in any case, within thirty days after his entry into Kenya'. The act also indicates that the commissioner who receives such applications shall consider all applications within 90 days (including conducting any investigations or inquiry and request oral presentation from the applicant) and after this will communicate the decision in writing to the applicant within 14 days. Article 12 provides for applicants to remain in the country until they have been recognised as refugees and in case of rejection of application, until they have exhausted their right of appeal. Where the appeal fails, they are granted 90 days to remain in the country as they seek admission to another country of their choice.

of Somalia's government. All refugees in Kenya are expected to remain in camps, partly due to concerns over national security (Goitom 2016). Kenya's 2014 law made it a criminal offence for refugees to reside outside of the camps without official permission. An exception to Kenya's encampment policy is for refugees granted official permission to reside outside of the camps due to health, education or protection concerns, among others (NRC and IHRC 2017).

With this new law in force, refugees in cities were expected to relocate to camps. However, this decision was declared unconstitutional and in violation of the refugee laws and international conventions that Kenya is signatory to (Refugee Consortium of Kenya 2018). Therefore, refugees residing outside of Kenya's designated camps will not be forcibly sent to them.

There have been several changes to the official agencies that work with refugees and determine their status in Kenya. For example, since 2014, refugee status determination (RSD) is handled by the Kenyan government, a shift from when UNHCR was largely responsible for this. After successful RSD, the individual receives a protection certificate, commonly known as a 'mandate' and a refugee identification card. In 2016, the government disbanded the Department of Refugee Affairs (DRA) and replaced it with the Refugee Affairs Secretariat (RAS).

This change was later declared unconstitutional, but the RAS still has the mandate to oversee all matters of refugee determination. Current practice requires asylum seekers to report to the RAS/DRA offices in Nairobi, Dadaab or Kakuma. If they report to the RAS offices in Nairobi, individuals obtain proof of registration and a movement pass. This allows them travel to the camps for RSD and subsequent documentation (Refugee Consortium of Kenya 2018).

These changes have created confusion among refugees and agencies in Kenya. There are also lengthy delays and multiple documents issued to refugees as proof of their registration. Some asylum seekers wait several years before their status is determined and documentation issued (NRC and IHRC 2017). RSD is not usually conducted in Nairobi, except for those asylum seekers with compelling reasons not to present themselves in the designated camps (e.g. those facing acute threats in the camps, or with health conditions requiring their presence in Nairobi). These barriers have left some refugees without any official documentation. Lack of documentation can curtail refugees' access to banking (including mobile money transfer services), mobile SIM registration, and healthcare among other vital services (NRC and IHRC 2017).

In the 1960s to late 1980s, refugees could engage in formal employment, but this is becoming increasingly difficult (NRC and IHRC 2017; Campbell et al. 2011). Kenya's encampment policy constrains their ability to move about the country. In addition, work permits are rarely issued to refugees, even though these are officially provided for in the Refugees Act (National Council for Law Reporting 2006) and in the Kenya Citizenship and Immigration Act (National Council for Law Reporting 2011). Similarly, refugees can apply for naturalisation if they meet certain requirements, which on the face of it are not prohibitive. But in practice, Kenya does not naturalise refugees (Goitom 2016). There are also difficulties in enforcing the encampment policy, particularly for refugees who arrive directly in urban areas and are unregistered. Others leave the camps for urban areas, where they often find informal livelihoods.

In Kenya's urban centres, many refugees remain 'underground' for fear of being repatriated or taken to camps. They frequently struggle with low incomes, discrimination and poor-quality shelter. Many live alongside Kenyans in low-income areas and informal settlements ('slums'), where they share disadvantages including poor housing, congestion and the lack of basic services or infrastructure. Refugees may also face unique challenges, including paying higher prices for housing and services as well as hostile treatment from host communities (Pavanello et al. 2010). These challenges are exacerbated as refugees in Kenya cannot get formal jobs, owing to restrictions on their formal employment (Goitom 2016). This means many skilled refugees must work in the informal sector, where real incomes are typically low (ibid). Low household incomes significantly affect access to vital services, including healthcare. Urban refugees often have limited access to employment and credit and struggle to access adequate shelter, healthcare or infrastructure (UNHCR and Danish Refugee Council 2012).

Humanitarian agencies provide support to refugees in camps, but those in cities usually remain underserved. Agencies face challenges in identifying urban refugees who live among host communities, including co-ethnics such as Kenyan Somalis and Ethiopians (Dix 2006). In camps, refugees are easily accessible for programme implementation and monitoring. But in urban areas, refugees are spread across the city and are highly mobile. In addition, urban agencies are not as well-coordinated as those in the camps, limiting their outreach (ibid).

For refugees in urban areas, academics and practitioners usually focus on issues relating to livelihoods and legal status. Past literature has often neglected urban refugees' access to healthcare, housing and infrastructure. Research also tends to overlook shared challenges between urban refugees and host communities, who may sometimes overlap.

[1] See for example Haysom (2013); Pavanello *et al.* (2010).

Both groups can experience low-quality shelter and pervasive poverty. There is a need to rethink urban displacement, gather more detailed data and engage with local authorities to address the specific needs of these populations (Walnycki 2019; Earle 2019).

1.2 Objectives

In this study, we aimed to assess urban refugee access to healthcare, housing, infrastructure and services and explore ways to foster inclusive healthcare systems and equitable shelter provision. Our specific objectives were to:

- Assess key health challenges facing newly arrived and longer-term refugees in urban areas.
- Assess refugee access to shelter and vital infrastructure and services, including water, sanitation and energy.
- Compare health-seeking practices and barriers faced by recent and longer-term refugees.
- Conduct secondary data analysis to compare refugee access to healthcare, shelter and other vital infrastructure and services with that of residents in Nairobi's informal settlements.

This study was funded by the British Academy's Cities and Infrastructure Programme, with data-collection led by the African Population and Health Research Centre (APHRC). From June to August 2018, we conducted household surveys in three of Nairobi's low-income neighbourhoods with high concentrations of refugees in addition to qualitative data-collection (see below).

1.3 Methodology

1.3.1 Sample size

There is limited available data to estimate the proportion of urban refugees with access to health care. Therefore, we assumed a 50 per cent access to healthcare and computed a sample size of 847 refugees, as shown below.

Where:

n = required sample size of the individuals of the target population

p = expected rate or prevalence of the key indicator to be estimated, which was assumed to be 50 per cent for healthcare use

deff = design effect

e = margin of error to be tolerated at 95 per cent level of confidence, set at different sizes for different indicators

$z1\text{-}\alpha/2$ = critical value for the standard normal distribution corresponding to a Type I error rate of α for a two-tailed test. For $\alpha = 0.05$, $z1\text{-}\alpha/2$ is equal to 1.96.

The final computed sample was adjusted for non-response, which was estimated at 10 per cent, and the final sample was 847, and rounded off to 850 households.

1.3.2 Data

We collected primary data using a cross-sectional household survey with refugees living in three of Nairobi's low-income neighbourhoods. Each area has a sizable number of refugees, as follows:

- Eastleigh is predominantly home to Somali and Ethiopian refugees, who live alongside Somalis of Kenyan origin
- Kawangware has refugees mainly from South Sudan and the Democratic Republic of the Congo (DRC), and
- Umoja/Kayole has mostly Congolese, Burundian and Rwandese refugees.

Eastleigh and Umoja/Kayole consist of mainly high-rise residential units and are typically seen as low-income neighbourhoods, rather than slums. On the other hand, Kawangware is a slum neighbourhood. Recently, it is undergoing recent transformations, with high-rise flats replacing non-permanent slum dwellings. Refugees in Kawangware typically live in areas with better housing, though a few individuals responding to our survey and interviews lived in its slum section.

We worked with refugee community representatives to identify refugee households. These representatives acted as community mobilisers for the interviews and would contact potential respondents, then guide data-collection teams to the homes. If the potential respondent consented to participate, interviewers then conducted interviews.

We interviewed individuals who self-identified as refugees as we did not wish to seek proof of registration and/or documentation status of respondents. Sampling was purposive, but with conditions to interview up to three households within the same block and from different floors where refugees lived in high-rise buildings. Qualitative data were gathered during focus group discussions (FGDs), which involved refugees from the different nationalities represented in Nairobi. The same mobilisers were instrumental in recruiting respondents for the FGDs and in identifying venues for these discussions. We also conducted in-depth interviews with representatives of refugee agencies working in Kenya.

In the analysis, we categorised refugee nationalities based on shared ethnic/cultural backgrounds. Refugees from the DRC and the Republic of the Congo (Congo-Brazzaville) were grouped into one category (due to the very low numbers of respondents from the latter).

Similarly, Rwandese and Burundian refugees were treated as one category, as were Ethiopians and Eritreans and also Ugandans, Sudanese and South Sudanese respondents. Refugees from Somalia form a single category.

It should also be noted that refugees in Nairobi are not homogeneous in their socioeconomic status. In this study, refugee survey respondents do not live in Nairobi's poorest areas and can therefore access higher standards of housing and services than slum-dwellers (see Section 6.1 Key findings).

For the secondary data analysis comparing refugees with residents of informal settlements, we used findings from the Nairobi Urban Health and Demographic Surveillance System (NUHDSS). This longitudinal study follows the entire population residing in Nairobi's Korogocho and Viwandani slums, which are located seven kilometres apart:

- Korogocho lies to the north-east of the city and borders the municipal dumpsite in Dandora, which remains a critical environmental challenge for residents. The settlement's population is older, less educated, and many families have lived there for several decades.
- Viwandani is located in the heart of the industrial area, and residents face environmental challenges related to industrial effluents and emissions. The population in Viwandani is more youthful, better educated and highly mobile compared to Korogocho (Emina et al. 2011; Beguy et al. 2015).

The NUHDSS conducts biannual data-collection visits to update residents' key demographic events such as births, deaths (including verbal autopsy to determine cause of death), migration/mobility and education. Socioeconomic data are collected once each year to understand household poverty dynamics.

We used the 2018 data on household characteristics for housing, sanitation and water sources. We tabulated these variables for the two slums and contrasted them with results from the refugee study to assess similarities and differences in the aforementioned indicators. The NUHDSS does not collect routine information on access to healthcare, and therefore we did not compare refugees with host communities on this indicator.

2

The migration journey

In this section, we outline our findings relating to refugees' and asylum seekers' countries of origin, their reasons for leaving home, and why they chose to come to Nairobi.

2.1 Countries of origin

According to the UNHCR, most refugees and asylum seekers in Kenya originate from Somalia (54.7 per cent). South Sudanese also form a considerable proportion (24.5 per cent) alongside Congolese (8.6 per cent) and Ethiopians (5.9 per cent) (UNHCR 2018b). Refugees from other countries such as Sudan, Rwanda, Eritrea, Burundi, Uganda and others make up 6.4 per cent of the total refugee population, estimated at 471,724 as at the end of December 2018 (ibid).

For refugees in Nairobi, the UNHCR estimated the total as 75,742 at the end of December 2018. Refugees from DRC accounted for the largest proportion (38.3 per cent), while those from Somalia followed at 29.8 per cent. Ethiopians and South Sudanese formed 14.2 per cent and 7.7 per cent respectively, while those from Burundi comprised 4.3 per cent. Other nationalities including Eritreans, Rwandese, Ugandans, Sudanese and others form 5.8 per cent of refugees in the city (UNHCR 2018b). However, these findings may underestimate the actual urban refugee population due to incomplete registration, and some researchers have given slightly higher figures for refugees living in Nairobi (Mohammed et al. 2014).

Figure 1. Distribution of refugees in Nairobi by country of origin

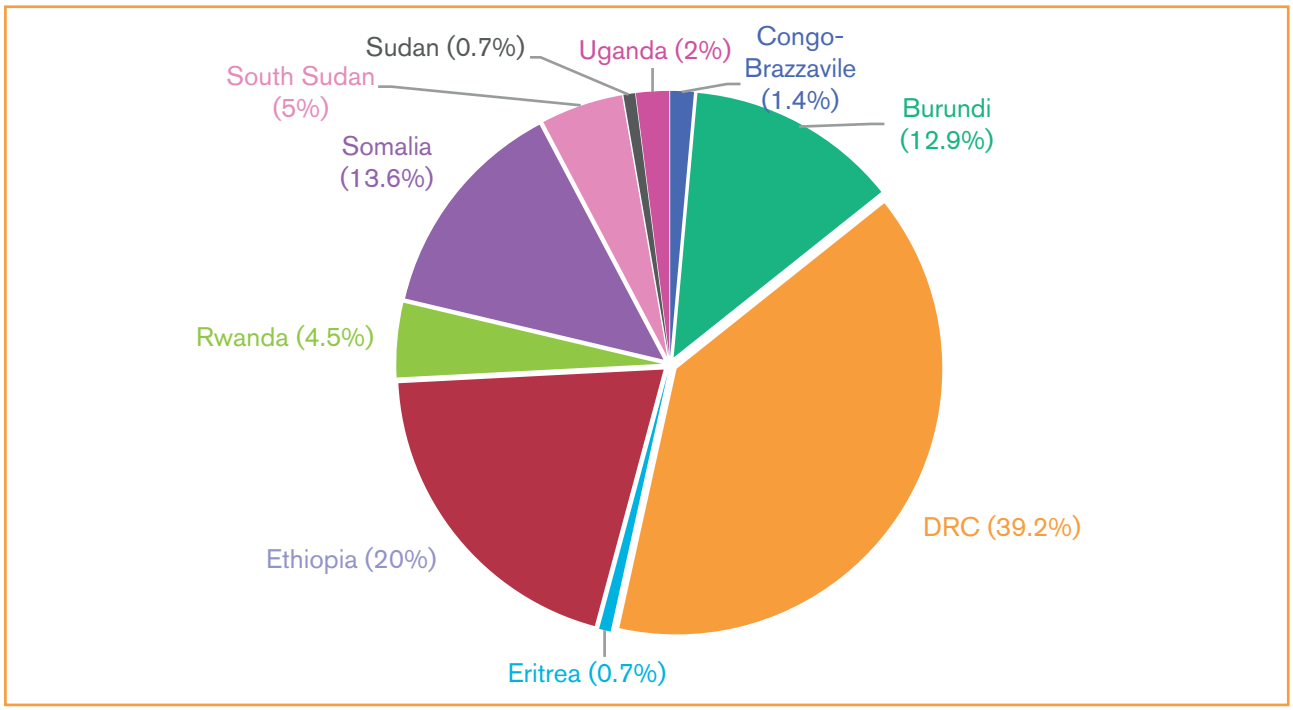


Figure 1 shows the distribution of refugees in our study's sample in Nairobi, disaggregated by country of origin. Refugees from the DRC formed the highest proportion (39.2 per cent) followed by Ethiopians at 20 per cent. Refugees from Sudan and Eritrea formed just 0.7 per cent.

2.2 Reasons for leaving home country

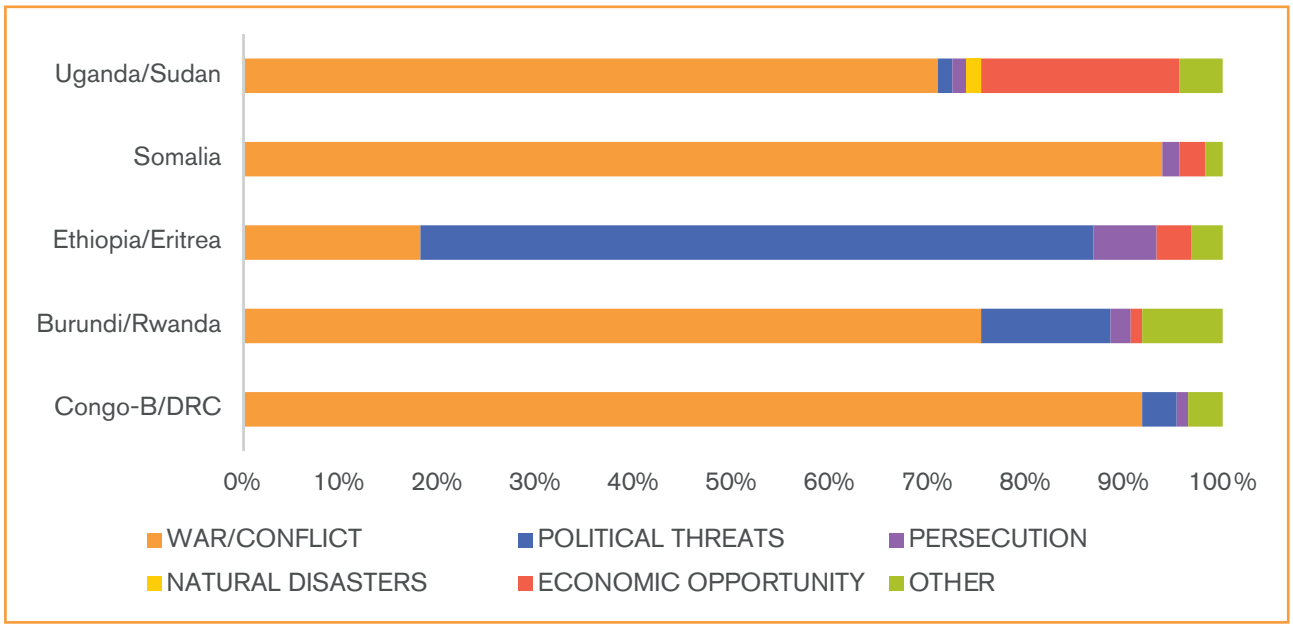
We sought to identify the reasons why respondents left their country of origin. The majority fled war/conflict (72.3 per cent), while 18.1 per cent were fleeing political threats (Figure 2). When disaggregated by country of origin, refugees from Somalia and those from the DRC/ Congo-Brazzaville formed the highest proportions reporting war/conflict as the main reason for leaving their home country (93.9 per cent and 91.8 per cent, respectively). Meanwhile, those from Ethiopia/Eritrea formed the largest proportion of those fleeing political threats (69 per cent). A considerable proportion of Ugandan/Sudanese refugees (20 per cent) reported economic opportunity as a reason for leaving their home country.

After first leaving their homes, 27 per cent of refugees were internally displaced within their countries of origin. The rest went to other countries, with almost half coming directly to Kenya. Before moving to Nairobi, 60.9 per cent of respondents indicated that they lived in an established refugee camp, 12.2 per cent in a makeshift camp, and 14.8 per cent lived in a non-slum urban area. The proportion reporting living in an urban slum area was 4.4 per cent, while 5.2 per cent lived in rural areas. Disaggregation by country of origin indicates that refugees from Burundi and Rwanda had the highest proportion who reported having lived in an established refugee camp (87.5 per cent) followed by those from Uganda, Sudan and South Sudan (83.3 per cent). The lowest proportion previously in a refugee camp was reported by those from Ethiopia and Eritrea (31.8 per cent).[2]

Table 1. Mode of transport used to flee from home country (%)

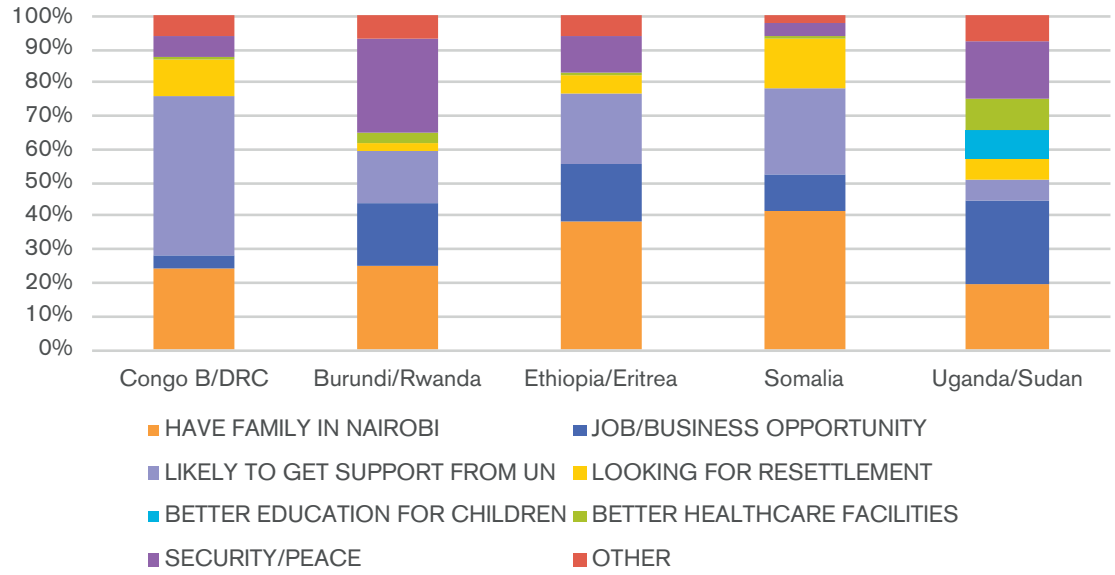
MODE OF TRANSPORT	NEWLY ARRIVED REFUGEES	LONG-TERM REFUGEES	TOTAL
Car/bus	71.3	56.6	60.1
Truck	36.6	46.9	44.4
Plane	1.5	0.8	1.0
On foot	33.7	22.1	24.9
Total respondents	202	638	840

Figure 2. Reasons for leaving country of origin



[2] It is worth noting that the absolute numbers for this tabulation were very small (total of 115 respondents).

Figure 3. Reasons for coming to Nairobi



Migration journeys involved various modes of transport. Travelling by car/bus was the most commonly reported (Table 1). And there were differences based on whether refugees were long-term residents (living for over one year in Nairobi) or recent arrivals (living for up to one year in Nairobi). New arrivals were more likely to use a car/bus (71.3 per cent) or walk (33.7 per cent) than longer-term refugees. The latter reported use of car/bus (56.6 per cent), truck (46.9 per cent) and walking (22.1 per cent).

2.3 Reasons for coming to Nairobi

We asked refugees for the main reason why they chose to live in Nairobi rather than in other cities in Kenya (Figure 3). The largest proportion of respondents cited the likelihood of getting support from the United Nations and non-governmental organisations (NGOs) (30.2 per cent). This was followed closely by having family in Nairobi (29.5 per cent). The reasons also varied by country of origin, with 47.5 per cent of Congolese refugees citing likelihood of receiving support from UN/NGOs as the main reason for coming to Nairobi. Among refugees from Rwanda/Burundi, security/peace was the main reason bringing them to Nairobi (28.1 per cent). On the other hand, 38.5 per cent of Ethiopian/Eritrean and 41.2 per cent of Somali refugees indicated that having family in Nairobi was what mainly drew them to the city. Meanwhile, Nairobi's job/business opportunities were important among Ugandan/Sudanese refugees (24.6 per cent).

3

Barriers to accessing healthcare

Most refugees arrived with health needs, due to challenges faced both in their country of origin and while in transit. Given that most refugees fled conflict/war, it is possible that healthcare systems in the country of origin were already weakened and any health issues arising there were carried forward to the destination. Newly arrived refugees usually lack information on how Kenya's healthcare system works and face various barriers in accessing healthcare, such as language and cultural barriers (Kasozi et al. 2018; Woodgate et al. 2017). These factors can all affect refugees' health outcomes, and the following section will discuss refugee access to healthcare in Nairobi as well as the barriers they face.

3.1 Health issues before and after arriving in Nairobi

About 42 per cent of respondents had pre-existing health issues upon arriving in Kenya (Table 2). New arrivals more frequently reported their pre-existing health conditions (45.5 per cent) as compared to long-term refugees (40.4 per cent). The highest proportion with pre-existing conditions was refugees from Burundi/Rwanda (45.2 per cent), while the lowest was among Somalis (35.1 per cent). However, there were few significant differences by refugees' duration of stay and country of origin. The only statistical significance was for hypertension: a significantly higher proportion of longer-term refugees (8.5 per cent) had this condition, as compared to newcomers in Nairobi (2.2 per cent).

The various pre-existing conditions reported in the survey included asthma/other respiratory conditions, ulcers, hypertension, HIV and injuries as well as rape (including post-rape trauma) and other reproductive health issues. Ulcers and other stomach problems were the most prevalent, with long-term and newly arrived refugees having almost identical proportions (14.7 per cent and 14.1 per cent, respectively). These were followed by injuries, asthma/chest problems and rape/rape-related trauma.

Table 2. Health issues experienced before coming to Nairobi (%)

	CONGO B/DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL	PEARSON CHI² (P)
Asthma/ respiratory problems	19.6	3.0	8.8	12.5	14.3	13.1	12.467 (0.014)
Injuries	10.8	13.6	26.5	7.5	7.1	13.7	12.733 (0.013)
Ulcers/stomach problems	14.9	21.2	8.8	12.5	14.3	14.6	4.293 (0.368)
Rape/rape-related trauma	12.8	4.6	13.2	7.5	7.1	10.3	4.679 (0.322)
Hypertension	3.4	6.1	5.9	20.0	10.7	6.9	14.441 (0.006)

Disaggregation of pre-existing health issues by country of origin revealed that those from DRC/Congo-Brazzaville were more likely to report asthma/respiratory problems (19.6 per cent) with Ugandans/Sudanese and Somalis following at 14.3 per cent and 12.5 per cent respectively. The lowest proportion of respiratory problems was reported by those from Burundi/Rwanda (3.0 per cent). There were significant differences in the proportions reporting these conditions (Chi^2=12.47; P<0.05). Injuries were reported most by those of Ethiopian/Eritrean origin (26.5 per cent) while those from Uganda/Sudan had the lowest proportion (7.1 per cent). There was a significant difference in the proportions reporting injuries (Chi^2=12.73; P<0.05). For hypertension, there were again significant differences in proportions (Chi^2=14.44; P<0.05), with those from Somalia having the highest proportion (20 per cent) and the lowest those from DRC/Congo-Brazzaville (3.4 per cent).

When asked if they experienced health issues since arriving in Nairobi, 68.3 per cent of interviewees said they had (Table 3). However, there were significant differences in the proportions of people reporting health issues they had experienced since arriving in Nairobi by both duration of stay (Chi^2 5.93; P<0.005) and country of origin (Chi^2=22.99; P<0.000). By country of origin, the highest proportion of respondents were of Somali origin and the lowest was DRC/Congo-Brazzaville respondents. In terms of duration of stay, long-term refugees were more likely to have experienced health issues since arriving in Nairobi (70.5 per cent) as compared with newly arrived refugees (61.4 per cent).

Health issues faced since arriving in Nairobi included pre-existing chronic conditions (eg asthma, hypertension, HIV), as well as new conditions like diabetes and pneumonia (Table 4). While some are chronic (e.g. diabetes), it is possible that the individuals reporting these conditions were not diagnosed until arriving in Nairobi. In situations of war, local healthcare systems in the country of origin are often dysfunctional, making diagnosis difficult.

The most reported health issue experienced since arriving in Nairobi was asthma/respiratory problems, followed by malaria and pneumonia. The least reported was HIV/AIDS. Statistically significant differences were noted for asthma/respiratory problems, pneumonia and diabetes. Respondents of Somali origin reported the highest proportions for the top three conditions

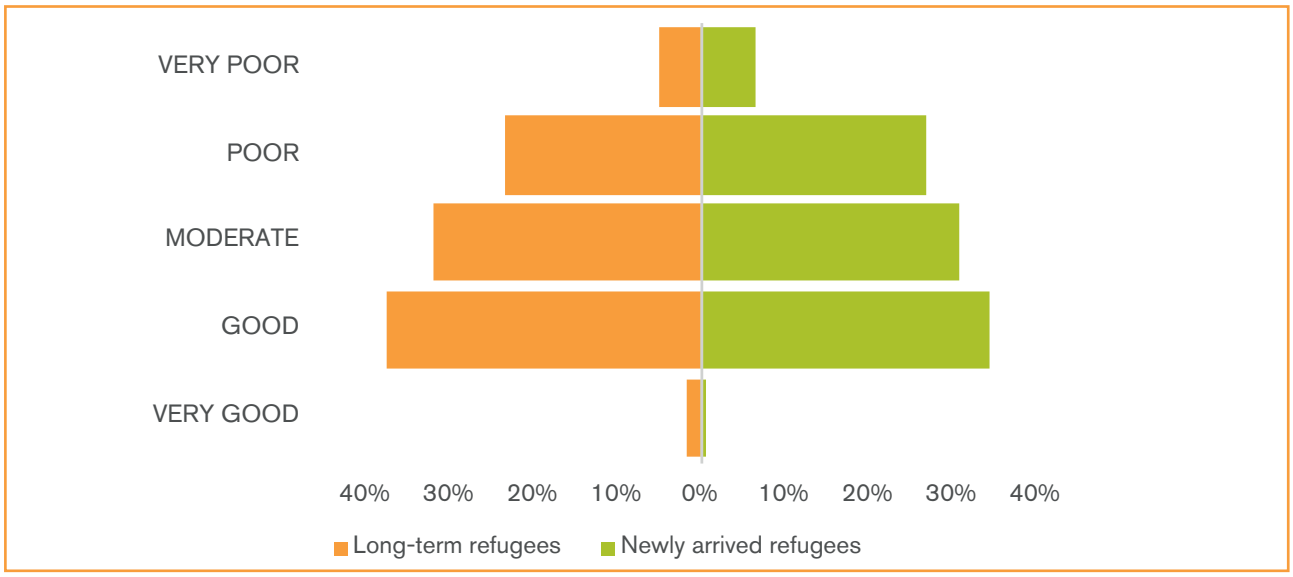
Table 3. Health issues experienced since arriving in Nairobi by country of origin (%)

	CONGO B/ DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL
Yes	61.0	71.9	73.0	82.5	61.5	68.3
No	39.0	28.1	27.0	17.5	38.5	31.7
Total respondents	341	146	174	114	65	840
Pearson $chi^2(4)$ = 22.9856 Pr = 0.000						

Table 4. Health issues experienced since arriving in Nairobi (%)

	CONGO B/ DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL
Asthma/respiratory problems	11.5	23.8	25.2	28.7	22.5	20.4
Malaria	11.1	18.1	19.7	29.8	17.5	17.8
Headache	8.7	14.3	15.0	16.0	10.0	12.4
Pneumonia	8.7	18.1	11.0	8.5	2.5	10.5
Stomach issues	6.7	8.6	10.2	11.7	12.5	9.1
Hypertension	7.2	6.7	6.3	9.6	2.5	7.0
Diabetes	1.0	2.9	6.3	2.1	0.0	2.6
HIV/AIDS	1.9	1.9	2.4	0.0	5.0	1.9
Total respondents	208	105	127	94	40	574

Figure 4. Self-rated health



(asthma/respiratory problems, malaria and headache). For pneumonia, the highest proportion was reported by those from Burundi/Rwanda with the lowest for those from Uganda/Sudan. It is worth noting that malaria is not endemic in Nairobi, and it is possible that respondents were referring to other fevers or malaria that was contracted outside of Nairobi.

3.2 Self-rated health

Respondents were asked how they rated their health at the time of the survey. Only a very small proportion indicated their health as 'very good'. New arrivals were less likely to rate their health as 'very good,' while they were more likely to rate their health as 'very poor' compared to long-term refugees. Further, 37.8 per cent of long-term refugees and 34.7 per cent of newly arrived refugees reported their health as 'good' (Figure 4).

Analysis of the above responses based on refugees' duration of stay and country of origin found significant differences by country of origin (Chi2=98.78; P<0.000), but not by duration of stay. No respondent of Somali origin responded that their health was 'very good'. Most respondents indicated their health was moderate to good. The highest proportion giving this response was Somali respondents (81.6 per cent), followed by those of Ethiopian/Eritrean origin (71.3 per cent), Congolese (69.2 per cent), and Burundi/Rwanda (58.9 per cent). On the other hand, those reporting 'very poor' health accounted for 5.4 per cent of the respondents, with the highest proportion from Uganda/Sudan (10.8 per cent), followed by Burundian/Rwandese (8.2 per cent), Congolese (5.0 per cent) and Somali respondents (1.8 per cent).

3.3 Main household health issues

Refugees have faced precarious situations in their countries of origin, in transit, and at their destination. It is unsurprising that they also face a range of health challenges. We assessed the health issues experienced in the 12 months before the survey by three different age groups: children aged five years or less, children aged above five years and below 17 years, and adults. Household health issues varied across the different age groups.

For those aged five years and younger, the top three health problems were coughing (90.1 per cent), fever (64 per cent), and diarrhoea (56.2 per cent). Among children older than five years, the top three health problems were coughing (82.6 per cent), diarrhoea (44.4 per cent) and injuries (40.8 per cent). For adults in the household, the top three health problems were coughing (70.8 per cent), injuries (30.9 per cent) and diarrhoea (26.5 per cent).

Across all age groups, consistently higher proportions of long-term refugees reported the top three health issues, as compared with newly arrived refugees. Statistically significant differences in proportions were also observed for fever among children aged five years or less, for injuries among children aged between five and 17 years, and for diarrhoea and injuries among adults.

3.4 Refugees and seeking healthcare

Healthcare seeking among refugees is fraught with challenges, especially where documentation remains a concern (NRC and IHRC 2017; UNHCR and Danish Refugee Council 2012). Due to Kenya's refugee encampment policy (Security Laws (Amendment) Act No. 19 of 2014), many refugees in urban areas are not registered with the refugee agency. This severely limits them as to which healthcare providers they can use. Registered refugees have access to government health facilities, who are the healthcare providers on behalf of UNHCR. But unregistered refugees often face challenges when accessing public healthcare. The alternative is to use private health facilities, but fees may be prohibitively expensive. Refugees who cannot afford the fees often seek care from unreliable sources including local shops and herbalists. At worst, they may forego medical care, negatively affecting their long-term health.

Figure 5 presents the range of healthcare providers that respondents used whenever they or members of their households fall sick. Results are presented by the country of origin.

Government health facilities were the main healthcare providers used by all refugees, particularly respondents from Somalia, Burundi/Rwanda, DRC/Congo Brazzaville and Ethiopia/Eritrea. Meanwhile, the least-used providers were community health workers (only 0.4 per cent) and traditional healers/herbalists (2.2 per cent). Refugees of Ethiopian/Eritrean origin were more likely to use private health facilities (40.8 per cent) compared with the rest of the refugees. Somalis were more likely to use other healthcare providers, including shops and mobile clinics, and had the highest proportion (68.9 per cent) using pharmacies. Statistically significant differences were noted for the following healthcare providers: religious health facilities, private health facilities, pharmacies, mobile clinics, shops and traditional healers/herbalists, with those from Somalia being more likely to use these providers compared to other nationalities.

3.5 Barriers to seeking healthcare

Various factors continue to hinder refugees from accessing healthcare in Nairobi, including costs, language and documentation. Previous studies have identified language barriers, provider attitudes, and cultural issues as factors contributing to refugees' poor use of health services (Arnold et al. 2014; Woodgate et al. 2017; Kasozi et al. 2018).

Figure 6 indicates that cost was the biggest barrier to healthcare, even when the provider is a government facility. Regardless of their country of origin, the proportion of refugees reporting cost as a barrier was high, ranging from 96.3 to 98.5 per cent. There was little variation in the proportions reporting this (above 90 per cent of respondents of all nationalities). Refugees' low incomes and prohibitive fees severely hamper access to healthcare. In Kenya, healthcare user fees are charged to all patients except for children under five and pregnant women. As long as user fees remain in place, costs will remain a key barrier.

The cost challenge is magnified by refugees' lack of income-generating opportunities and the barriers to establishing even small businesses. Most FGD

Figure 5. Range of healthcare providers

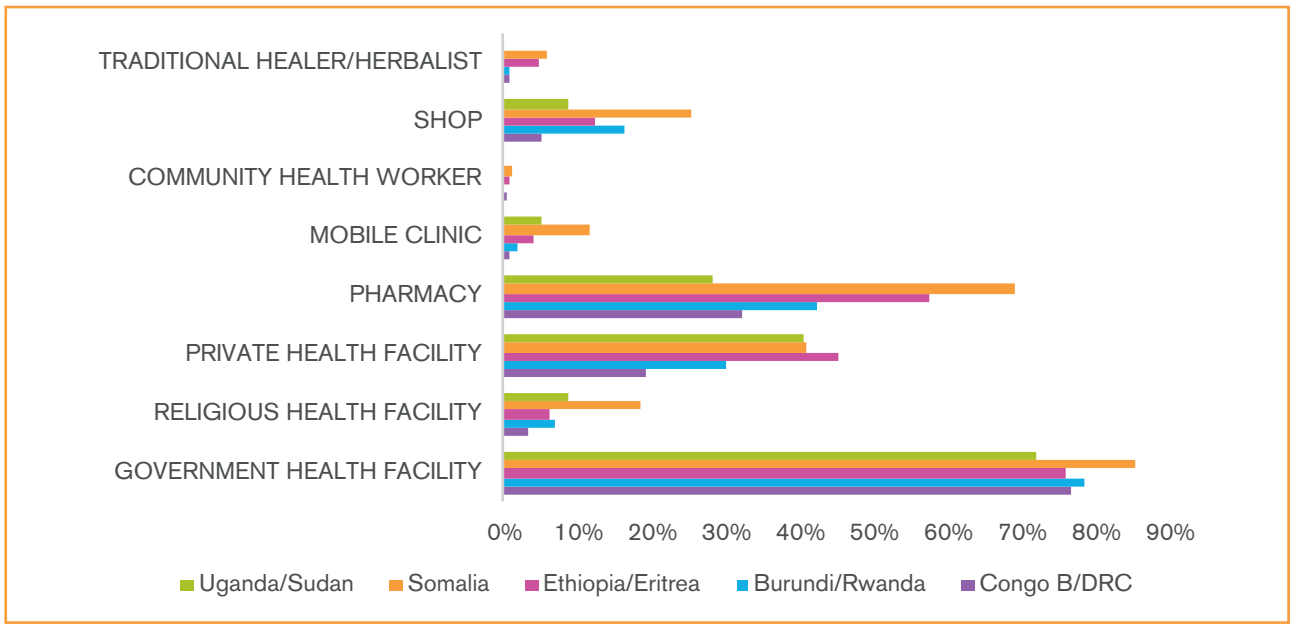
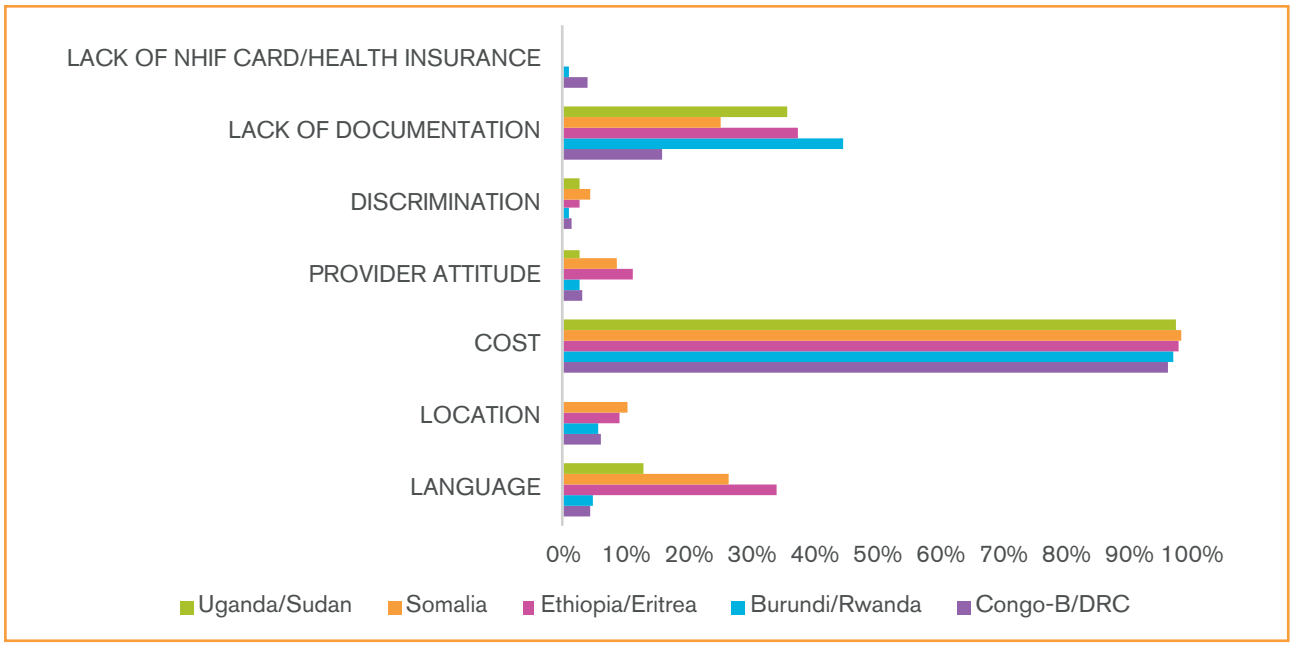


Figure 6. Barriers to healthcare use



participants indicated they suffered constant harassment by county council staff in charge of licensing all businesses, as well as from security officers who arrest them and demand bribes they cannot afford.

"I got the little money I had made that day and they (the police) brought me back near my small hotel (small restaurant) and let me go. Therefore, here in Kenya, it is difficult…The moment they see your ID, you are a refugee, you are told there is no job. And that job is there. If you try to open a business, you will be victimised…I had opened my small hotel but I was being victimised. You see now that improving oneself is a problem. The little you are able to make is taken by the police in form of bribes"
Burundi/Rwandese male, FGD Kawangware

Kenyan public health facilities, as with other African public health facilities, are known to experience frequent stock-outs, highlighting a shared concern amongst refugees and other low-income patients who struggle to access vital medications (Wanga and Muturi 2016; Nditunze et al. 2015; Wagenaar et al. 2014). Qualitative accounts from refugees indicate that most government health facilities lack medicines. Patients must purchase these from pharmacies outside the facility, which contributes to the high cost of treatment.

"Even if you go to the public hospital, you will not be given medication. You go there when you are very ill and after examination, they will write a prescription for you to go and buy medicines because the hospital has no medicines. I don't have any money in the house at all. What will I buy the medicine with when I don't have any money at all?"
DRC Congolese female, FGD Kawangware

Disaggregation by country of origin indicates that language was a major challenge among refugees from Ethiopia/Eritrea (33.9 per cent) and Somalia (26.5 per cent), but to a lesser extent for those from Uganda/Sudan (12.8 per cent). Lack of documentation was often a concern, ranging from 15.9 per cent among those from DRC/Congo-Brazzaville to 44.8 per cent among those from Burundi/Rwanda. This might be driven by fear among Rwandese refugees to report to the relevant authorities for registration and subsequent documentation. Anecdotal evidence indicates that the government of Kenya stopped accepting Rwandan refugees, which might push incoming refugees underground for fear of repatriation.

Qualitative accounts point to challenges with documentation and the resulting difficulties in accessing healthcare, especially among newly arrived refugees.

"Recent ones, the ones who have just come, they have not got mandate or any other document. They have to go to Shauri Moyo (the RAS/DRA offices), first to get permit so that they are not arrested by the police. He has nothing which he can use to go to hospital. They are more vulnerable than we are"
Somali female, FGD Eastleigh

Documentation was said to be so important that even when an individual had money to pay for services, without documents, there was no way to access them. This is more pronounced when a document is required, such as seeking health services in public hospitals.

"You might have the money but if you don't have the documents, no one will help you at all. Even your money will not help you."
Somali female, FGD Eastleigh

Both newly arrived and longer-term refugees were said to lack documentation, often due to the agencies' slow processing times. Many refugees could wait several years before receiving the requisite documents, and this delay can prevent refugees of all nationalities from making plans or accessing vital services.

"Whether you came earlier or just recently it is all the same […] You find someone has been here for 10 to 20 years living with a document which is not recognised by the government. You find that you cannot do anything as a refugee […] You cannot plan your life, your health, though we escaped from our countries running from the circumstances, death, wars or something. If they are saying refugees are people, they need to be welcomed. At least they should give someone a document that would help someone access life in any level that they feel is fit for them. But the problem we have is the paper which is determining your life, determining your future plan and when you go to the document offices, they tell that it is not yet out, you are not recognised, and with such things you find that life is really difficult. And that is the major thing that we all face, whether you come from Somali, Uganda or Kenya, Congo, Rwanda, Burundi, that is the same problem we are facing."
Ugandan male, FGD Eastleigh

Other barriers included location of the health facility, which has implications for transport costs, an issue further complicated by urban refugees' poverty and inability to pay bus fares.

"For those women who have those diseases (hypertension and diabetes), when they go to NCCK[3] for treatment, they are told there are no drugs. You find that a mother [is] seriously sick and she goes looking for medicines. Sometimes they are sent to Huruma to look for those medicines which is a distance, and they don't have [bus] fare to take them there."
Somali female, FGD Eastleigh

In addition, provider attitudes and discrimination were said to be barriers to healthcare access. The issue of discrimination was said to emanate not only from the host community but also from within the refugee community, as the following quote indicates.

"Even when it comes to health issues, the organisations, they (Rwandese identifying themselves as Congolese) are considered more than the rest. And the UN have kept us in the dark. You have created discord amongst ourselves, resulting into fighting amongst ourselves as refugees. We, the real Congolese, we don't have any peace here in Kenya. We are in a bad position and are facing very many challenges."
DRC Congolese male, FGD Kayole

Meanwhile, the lack of health insurance including the National Health Insurance Fund (NHIF) card was also mentioned. Not all refugees have the NHIF card and there is a lack of clarity on who is eligible for one.

"Not every refugee has that card. Maybe those with those unique diseases are the ones who are provided with the card."
DRC Congolese male, Kawangware FGD

Not even if you have those unique or chronic diseases you will not get it based on that. There are some people who don't have it."
DRC Congolese female, Kawangware FGD

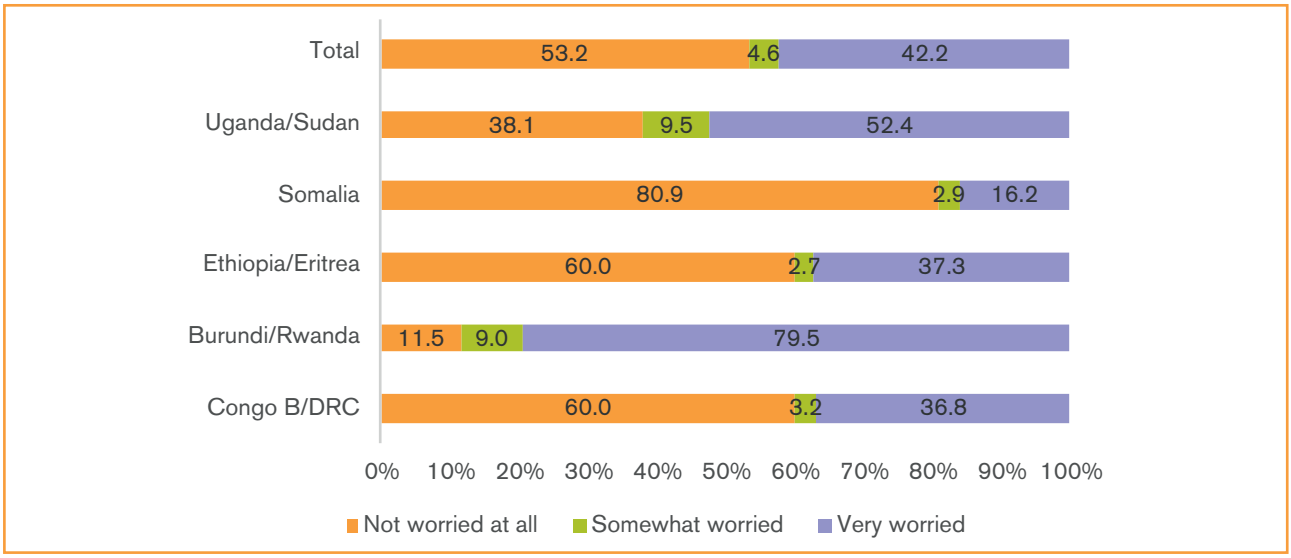
3.6 Healthcare services: levels of satisfaction

Respondents who had sought healthcare were asked if they were satisfied with these services. Approximately half were satisfied (52.7 per cent), with a slightly higher proportion of long-term refugees being satisfied compared with their newly arrived counterparts (53.4 per cent and 49.6 per cent, respectively).

Refugees' main reason for satisfaction was receiving proper medical treatment for their conditions (47.5 per cent). This was followed by good customer care at the medical facilities they visited (15.4 per cent). Good healthcare-provider attitude was the third most cited reason for satisfaction (11.0 per cent). Other reasons

[3] National Council of Churches in Kenya (NCCK) has a medical clinic in Huruma, Nairobi.

Figure 7. Levels of concern about personal and household health in Nairobi



included having diagnostic tests carried out, free medicines/services, and professionalism among facility staff.

On the other hand, dissatisfaction with medical services was driven by lack of medicines at facilities, or patients not getting their prescriptions filled out at the facility (23 per cent). This was followed by the high cost/lack of money for treatment, and perceived ineffective treatment/medicine (both at 21.5 per cent). Other reasons included lack of diagnostic tests and/or medical equipment, long waiting times at facilities, lack of health insurance through the NHIF scheme and issues with referrals (either too many, patients were sent to facilities with no direction on how to get there, or they went to the facility and received no service at all). Accounts from FGDs indicate that poor provider attitude coupled with low-quality services were the key drivers of dissatisfaction.

"As we have said, their services are of low quality. Once they know that they don't have what they need in order to offer better services, they will not talk to you well. Instead they will rudely tell you that is what they have and if you don't like that, it is up to you. Just imagine you went there because you are sick and then someone treats you badly like that, it is like their response to you is more valuable than the service you went to get from them. Instead of sympathising with you that you went for a reason, she/he now vents all her/his anger on you."

DRC Congolese male, Kawangware FGD

3.7 Health costs and other health concerns

Household budgets are negatively affected by unexpected spending, especially when the household experiences sudden shocks like a serious illness. Results indicate that annual spending on health varied widely across refugee households, with expenditure ranging from 50 to 370,000 shillings. The median amount spent annually on healthcare was 5,000 shillings among households of Somali, Burundi/Rwanda and Congolese origins; 6,000 shillings among Ethiopian/Eritrean refugees; and 7,000 shillings for refugees from Uganda/Sudan.

On whether the respondents' access to healthcare had changed since coming to the city, positive changes were reported such as using the NHIF card to meet the cost of healthcare (8.3 per cent), improved health services and facilities in public health facilities (35.9 per cent), easy access to hospitals (9.7 per cent) as well as affordable/free healthcare (10.3 per cent). A small proportion reported negative changes, such as inability to access medical care due to high costs in the city (5.5 per cent).

Results on whether respondents worried about their health and that of household members now that they lived in the city indicate that more than half (57.5 per cent) were worried. Disaggregation by country of origin (Figure 7) shows that Ugandan/Sudanese refugees had the highest proportion of those who are worried. The level of concern about health varied considerably across nationalities: the highest proportion being those from Somalia who were 'not worried at all' (80.9 per cent), while the group with highest levels ('very worried') were from Burundi/Rwanda (79.5 per cent). Most of these worries were driven by lack of money to afford better healthcare, joblessness and existing health issues.

4

Access to housing

Housing can be one of refugees' most daunting challenges. Housing costs in Nairobi are high and some refugees also reported facing discrimination from landlords. Even among citizens in Nairobi, home ownership remains low and most city residents are tenants (including those living in slums). A World Bank survey of over 14,000 households in 15 Kenyan cities found that 91 per cent of Nairobi's households rent, while rental shelter was slightly less prevalent in Nakuru (87.9 per cent), Mombasa (86.1 per cent), and Kisumu (74.1 per cent) (Gulyani et al. 2018: 59). Another study showed that slums in Nairobi and Mombasa had 85 per cent and 70 per cent renters respectively, with home ownership as low as 9 per cent in Nairobi slums (Mberu et al. 2017). The neighbourhoods where we conducted this survey are either slums or low-income areas where housing remains inadequate and poorly served with infrastructure such as sanitation and water. Here, we discuss key findings on housing and infrastructure provision, including comparisons to other residents of Nairobi's informal settlements.

4.1 Tenure type and size of house

As with other Nairobi residents, most refugees are tenants (94.8 per cent), with 5.2 per cent reporting to be squatters. Among residents in informal settlements, renters accounted for 88 per cent while owners and those living on property for free accounted for 8.6 per cent and 3.4 per cent respectively. There was little difference between long-term and newly arrived refugees in terms of tenure, except that newly arrived refugees were more likely to be squatters (9.9 per cent) compared with those who have lived in Nairobi for a longer duration (3.8 per cent).

Regarding house size, most refugees occupied a one-roomed house (64.8 per cent), 24.6 per cent were in a two-roomed house, and only 10.6 per cent lived in a house with three or more rooms. The average number of household members was five, exceeding the average of three people per household in host communities. The number of individuals sharing a house among refugees ranged from one to as many as 26.

With regards to nationality, 46 per cent of Ugandan/Sudanese, 54 per cent of DRC/Congolese, 69 per cent of Somali and 78 per cent of Burundian/Rwandan and Ethiopia/Eritrean refugees lived in a single room. Although one-room housing is prevalent across the groups surveyed, 34 per cent of DRC/Congolese lived in two-room houses and 31 per cent of Ugandans/Sudanese lived in three-room houses. The one-room house is a common feature especially in Nairobi's slums, serving simultaneously as the kitchen, living room and bedroom (KNBS 2018; Beguy et al. 2015).

4.2 Sources of drinking water

In many of Nairobi's slums, residents do not have a water supply in their homes. Instead, they rely on water vendors or communal taps in the compound. Our results indicate that the largest proportion of respondents similarly access their drinking water from taps in the compound (49.2 per cent), followed by those with water piped into their homes (21.8 per cent) and those buying from water vendors (17 per cent). Other sources of water include public standpipes and wells in the compound.

The results in Table 5 indicate that few refugees have piped water supply in their homes, with Burundi/Rwanda households reporting the lowest proportion and Somali households reporting the highest. Disaggregation by country of origin indicates variation in source of water among refugees. The highest proportion buying water from vendors were Burundi/Rwanda households, while the lowest were Somali households. In contrast, many Congolese, Ethiopian/Eritreans and Somalis had a piped supply of water to the plot/

compound (ranging from 51 per cent to 65 per cent). Among the groups surveyed, the highest proportion of households with water piped into their dwellings were Somalis and Ugandan/Sudanese.

When we compare refugees with the NUHDSS sites of Korogocho and Viwandani, we note some differences in the various sources of water. While water piped into the compound was the commonest among refugees (49.2 per cent), host communities relied mostly on water sellers/vendors who include those hawking water from handcarts, or buying from water-storage tanks or taps (90.2 per cent; see Figure 8). On the other hand, refugee households were more likely to have water piped into their homes (21.8 per cent) compared to host communities (9.3 per cent). While the host communities live in typical slum housing, most refugee respondents live in slightly better houses (although these are still considered low-income or slum-like). These houses are likely to have improved amenities compared to the typical slum settings, contributing to noted differences.

4.3 Types of sanitation facilities used

Access to sanitation remains a longstanding challenge in Nairobi's slums, with many residents having to share poorly maintained facilities with other households (APHRC 2014). There are also pay-per-use sanitation options, but costs can be prohibitive (especially for poor households), leading to open defecation. Elsewhere in the city, Nairobi's sewer connection is estimated at about 50 per cent, with many other residents relying on septic tanks and other on-site containment facilities.

Table 5. Sources of refugee household drinking water (%)

	CONGO B/ DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL
Water sellers/vendors	22.9	32.9	4.0	2.6	10.8	17.0
Piped into dwelling	19.7	8.2	24.7	36.0	30.8	21.8
Piped to compound	51.0	28.8	64.9	58.8	26.2	49.2
Public tap/standpipe	2.9	24.7	3.5	1.8	24.6	8.3
Well on residence	2.1	3.4	0.6	0.0	7.7	2.1
Other	1.5	2.0	2.3	0.9	0.0	1.6
Total %	**100**	**100**	**100**	**100**	**100**	**100**
Total respondents	**341**	**146**	**174**	**114**	**65**	**840**

Figure 8. Sources of household water in host communities

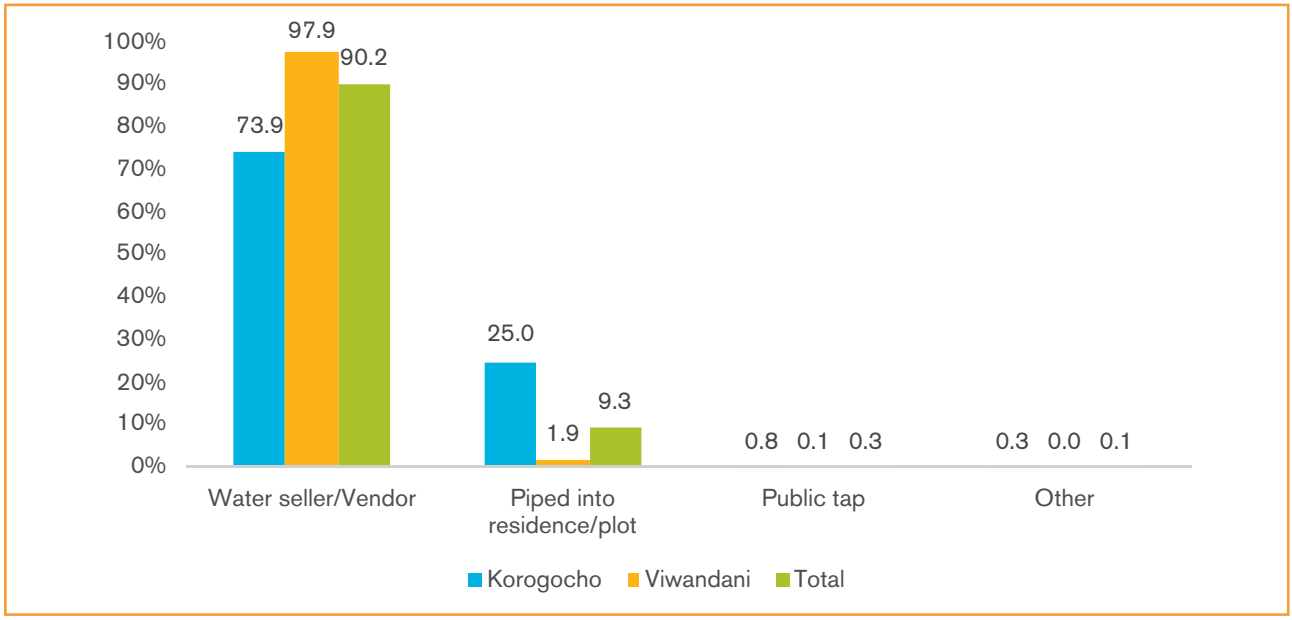


Figure 9. Sanitation facilities used by refugee households

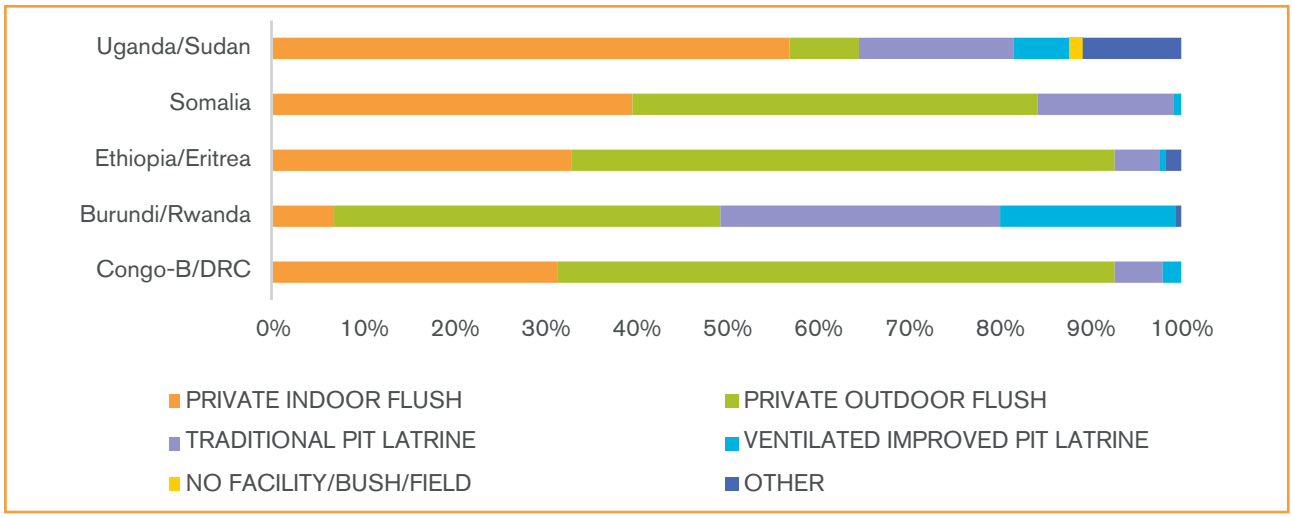
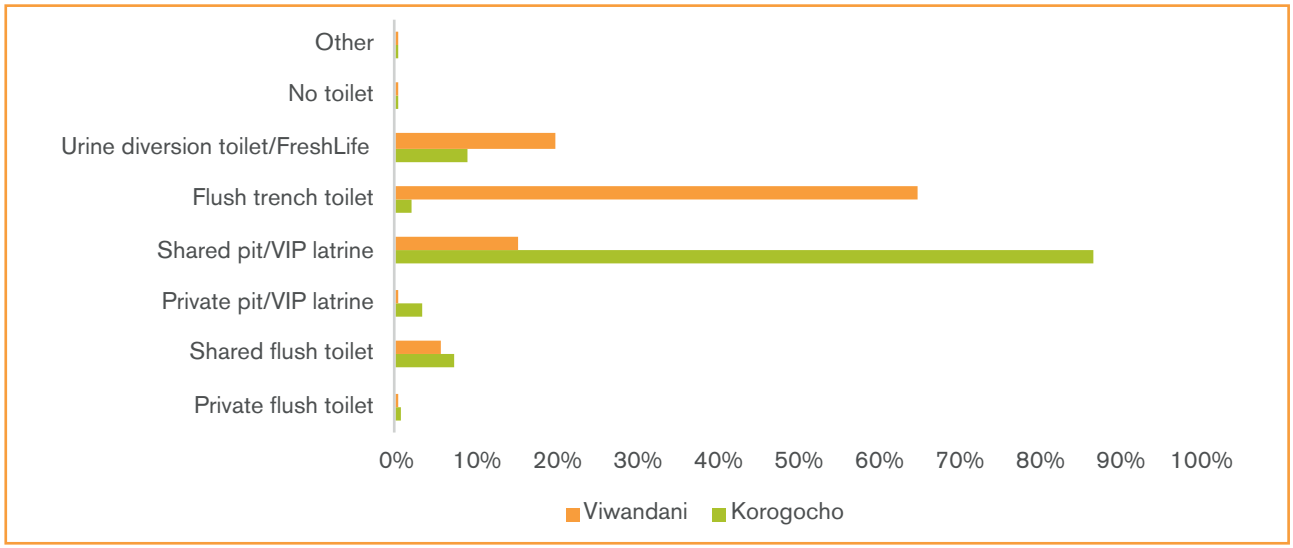


Figure 10. Sanitation facilities used by host communities



Results from this survey indicate that just over half of respondents use private outdoor flush toilets, with the second largest proportion using private indoor flush toilets (almost a third). As Figure 9 shows, when assessed by country of origin, Ugandan/Sudanese refugees had the highest proportion with access to private indoor flush toilets, while Congolese refugees had the highest proportion with access to private outdoor flush toilets. Only 1.5 per cent of Ugandan/Sudanese refugees reported having no toilet facility. On the other hand, refugees from Burundi/Rwanda reported the highest use of traditional pit latrines, which are often shared with other households. Past studies in East African cities have highlighted the problems of frequent filling up of these pits and the need for regular emptying (Murungi and van Dijk 2014).

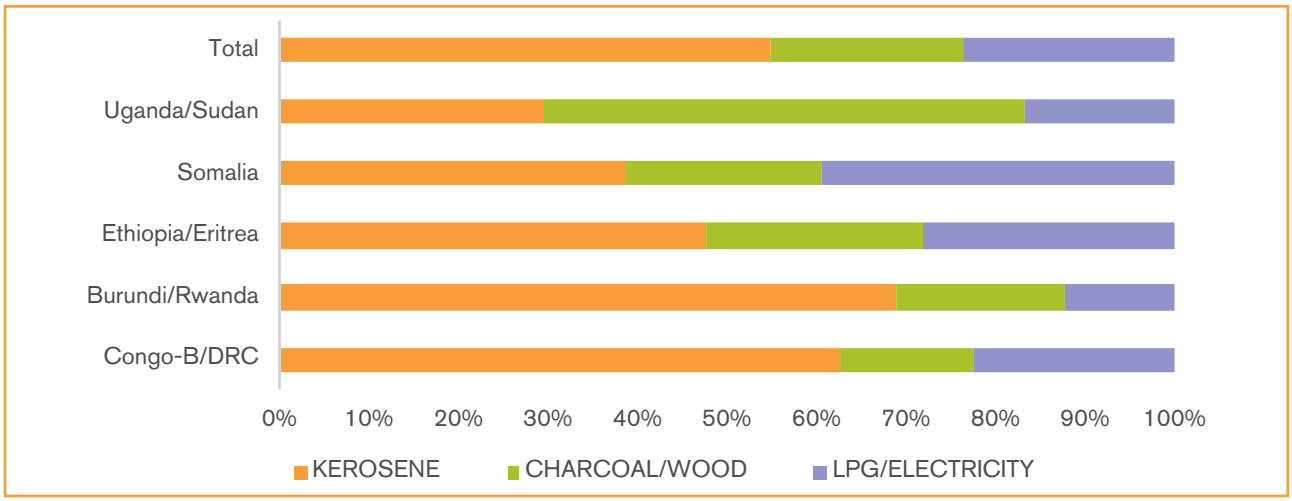
Analysing the toilet type by duration of stay revealed that long-term refugees were more likely to use private indoor flush toilets (34.3 per cent), while newly arrived refugees were more likely to use private outdoor flush toilets (57.4 per cent). Newly arrived refugees were also more likely than longer-term refugees to report using pit latrines (with 17.8 per cent using traditional latrines and 5.9 per cent having ventilated improved pit latrines or VIPs).

Access to sanitation among host communities differs from that of refugees since 93.7 per cent of residents in slums share toilet facilities with other households (Figure 10). Meanwhile, among refugees, private toilet facilities were the commonest (81.8 per cent). In addition, use of pit latrines was more common in the host communities (44 per cent) compared to 16.8 per cent among refugees.

4.4 Cooking and lighting fuels

Cooking and lighting fuels are a major source of indoor and outdoor emissions, especially if they are polluting fuels such as wood, charcoal or kerosene (PFPI 2011;

Figure 11. Household cooking fuels



Lam et al. 2012a and b). Results indicate that the most prevalent cooking fuel is kerosene (53.5 per cent) followed by liquefied petroleum gas (LPG) or electricity (Figure 11). Although nearly all refugees had electricity (84 to 96 per cent reported having power), there were stark variations in access to clean cooking fuels. For instance, Congolese and Burundians/Rwandans were more likely to use kerosene than Somalis or Ugandan/Sudanese. As many as 39 per cent of Somalis use gas, far exceeding the 12 per cent of Burundians/Rwandans using gas. Meanwhile, over half of Ugandans/Sudanese used charcoal, much higher than other refugee groups.

Among host communities, kerosene was the most common cooking fuel (80.5 per cent), which is higher than that of the refugee community (54.9 per cent). Use of electricity and LPG was higher among refugees (23.7 per cent) compared to the host communities (13.3 per cent). Higher proportions of the refugee communities used wood/charcoal (21.4 per cent) compared to host communities (6.1 per cent). The choice of fuel is usually driven by cost, though cultural preferences also remain important (Tembo et al. 2015; Nlom and Karimov 2015). Poorer households may prefer the cheaper wood/charcoal (compared to electricity or LPG), while also using convenient fuels like kerosene that can be purchased in small amounts depending on their available cash. LPG requires considerable investment to purchase the canister and burner, as well as higher payments for refills. The type of cooking fuel can strongly influence fire risks and indoor concentrations of pollutants, which can negatively affect household health (Epstein et al. 2013; Pope et al. 2010; also see conclusion).

For lighting, most households from both communities had access to electricity (93.8 per cent and 87.2 per cent among refugee and host communities respectively). Electricity was provided by the national grid and other sources, such as solar panels. The rest used candles, wood and kerosene. Only a small proportion reported using flashlights on their mobile phones. The high rates of electricity for lighting could reflect the World Bank and Kenya Power's slum electrification project in Nairobi, which aimed to provide safe connections to the national grid (KPLC 2015).

4.5 Housing challenges

We asked refugees about their housing challenges (Table 6). Many indicated having had difficulties raising rent or the rent was too high. This was followed by the poor condition of houses and congested rooms/small houses. Other issues included difficulty getting food and other basics such as bedding. When disaggregated by country of origin, Somali refugees had the highest proportion for three of these factors (small/congested house, difficulty getting food and other basics and difficulty raising rent/rent too high) compared to other refugees. On the other hand, refugees from Rwanda/Burundi had the highest proportion reporting poor condition of the house as a challenge.

Among newly arrived refugees, the biggest challenge was poor condition of the house (39.2 per cent), followed by difficulty raising rent/rent being too high (19.5 per cent). For their part, longer-term refugees cited the difficulty of raising rent/rent being too high as the major challenge (32.3 per cent) as well as house being too small/congested (21 per cent). FGDs provided further insights into these challenges, which were mentioned by several participants from multiple nationalities.

"You can have five or six children and you are in a one-roomed house. That is a real problem as to the sleeping conditions, there is no food and if you don't have money you cannot rent a two-roomed house, but you will end up in a single room."
Burundian/Rwandese female, FGD.

Access to water was another key challenge, particularly given Nairobi's ongoing water rationing. As a consequence, host communities often demand priority access to water before refugees.

"Other times you can live in a plot and the day water comes, you have to wait until all of them [host community members] have drawn enough water. Then that is the time you [the refugee] will be told to draw yours. They have to be satisfied that everyone has drawn enough water before they allow you to draw yours."
Burundian/Rwandese female, FGD Kawangware

4.6 Safety and adequacy of accommodation

When asked if their houses were safe and adequate, over half of the respondents (53.7 per cent) felt that their accommodation was safe. A higher proportion of long-term refugees (55.5 per cent) indicate this compared to 48 per cent of newly arrived refugees. Refugees from Somalia were more likely to report their accommodation as safe (62.3 per cent) followed by those from the DRC/ Congo-Brazzaville (59.5 per cent), with the lowest proportion being among Burundian/Rwandese refugees (37.7 per cent). Several reasons were given as to why accommodation was considered unsafe, such as general insecurity (42.9 per cent), the poor condition of the house (10.8 per cent) and threats or fear of eviction, among others.

We then asked why their accommodation was considered safe and adequate. As indicated in Table 7, good security was the most commonly mentioned reason. Others included having friendly neighbours, having a gate or perimeter wall around the compound, and being in a peaceful place.

Among the 29 per cent indicating their accommodation was adequate, having enough space for household members was the reason typically cited for adequate accommodation. Just 20 per cent of Ugandan/

Table 6. Refugee housing challenges (%)

	CONGO B/ DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL
House small/congested	14.7	10.9	29.5	35.7	15.2	19.6
Difficulty getting food/ basics	17.3	11.9	11.6	39.3	6.5	16.5
Difficulty raising rent/ rent high	41.0	17.8	22.1	48.2	17.4	30.4
House in poor condition	26.9	44.6	11.6	8.9	23.9	25.1
Other	36.5	27.7	50.5	35.7	50.0	38.8
Total respondents	**156**	**101**	**95**	**56**	**46**	**454**

Table 7. Reasons why accommodation is considered safe (%)

	CONGO B/ DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL
Friendly neighbours	8.4	5.6	3.1	0.0	3.9	5.3
Gated/walled compound	1.5	1.9	9.3	8.5	3.9	4.4
Good security	78.8	68.5	54.6	64.8	84.6	70.5
House in good condition	2.5	0.0	24.7	21.1	0.0	9.8
Peaceful	5.9	3.7	0.0	0.0	3.9	3.3
Other	21.7	27.8	13.4	15.5	15.4	19.3
Total respondents	**203**	**54**	**97**	**71**	**26**	**451**

Table 8. Reasons why accommodation is considered adequate (%)

	CONGO B/ DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL
Affordable	5.9	0.0	10.0	4.0	0.0	5.4
Enough space for household	65.9	66.7	58.3	66.0	69.2	64.3
House is spacious	22.4	27.3	6.7	16.0	7.7	17.0
Water/electricity available	1.2	0.0	25.0	20.0	7.7	11.2
Other	5.9	15.2	11.7	4.0	23.1	9.1
Total respondents	**85**	**33**	**60**	**50**	**13**	**241**

Table 9. Reasons why neighbourhood is considered unsafe and not well maintained (%)

	CONGO B/ DRC	BURUNDI/ RWANDA	ETHIOPIA/ ERITREA	SOMALIA	UGANDA/ SUDAN	TOTAL
Dirty environment	23.4	22.9	23.6	23.1	13.0	22.5
House in poor condition	0.5	1.0	13.4	6.2	8.7	4.9
Insecurity/high crime rate	45.0	60.0	47.2	53.9	56.5	50.4
Poor sewerage Management/sanitation	34.5	19.1	15.8	12.3	23.9	23.7
Poor drainage	10.1	25.7	7.1	12.3	17.4	13.2
Other	18.7	37.1	22.1	32.3	28.3	25.4
Total respondents	**209**	**105**	**127**	**65**	**46**	**552**

Sudanese, 23 per cent of Burundian/Rwandese and 25 per cent of Congolese refugees considered their accommodation adequate, compared with 34 per cent of Ethiopian/Eritrean and 44 per cent of Somalis. Table 8 gives a breakdown of the reasons why respondents felt their housing was adequate.

However, most respondents felt that their accommodation was inadequate (71.3 per cent), with a higher proportion of newly arrived refugees indicating inadequacy (79.2 per cent) compared with long-term refugees (68.8 per cent). With respect to country of origin, refugees from Uganda/Sudan had the highest proportion indicating their accommodation was inadequate (80.0 per cent), followed by Burundian/ Rwandese (77.4 per cent) and Congolese refugees (75.1 per cent). The lowest proportion was among those from Somalia (56.1 per cent).

When asked why they felt their accommodation was inadequate, key reasons included that the house was too small/congested (67.5 per cent) with inadequate space for the household (16 per cent), lack of privacy (8.9 per cent) and lack of water and electricity (1.7 per cent). Congestion/the house being too small was a more common concern for new arrivals and for certain nationalities. As many as 81 per cent of newly arrived Congolese and Burundian/Rwandese refugees said their house was too small, compared to 68 per cent of longer-term Congolese and 62 per cent of Burundian/ Rwandese refugees. Similarly, 69 per cent of newly arrived Ethiopian/Eritrean refugees said their house was too small, compared with 62 per cent of longer-term Ethiopian/Eritrean refugees.[4]

4.7 Neighbourhood safety and maintenance

Our study further assessed refugees' perceptions of their neighbourhoods with regards to safety and maintenance. Adequate security and a clean environment/proper refuse disposal were the two main reasons given (62.2 per cent and 47.3 per cent respectively). Ugandan/Sudanese refugees and those of Somali origin were more likely to cite adequate security as the reason for the neighbourhood being safe and well maintained (72.4 per cent and 68.0 per

[4] The other nationalities had too few respondents indicating small/congested housing for meaningful tabulation.

cent respectively). Further, a clean environment/proper refuse disposal was mentioned by a high proportion of Somali refugees (65.5 per cent) as a key reason why they consider their neighbourhood to be safe and well maintained.

We asked why they considered their neighbourhoods to be unsafe and poorly maintained. The main reason given was insecurity/high crime rates, followed by poor sewage management as seen in Table 9. There were statistically significant differences by country of origin for all reasons, except for living in a dirty environment and insecurity or high crime rates. The reported rate of insecurity may appear lower than expected, but qualitative accounts in FGDs indicate that refugees regularly confront other forms of insecurity, such as harassment by security officers and city council staff conducting random arrests (typically to extract bribes).

5

Access to agency support and education

5.1 Agency support

Our survey assessed refugees' access to help from various NGOs in their communities, as well as discrimination, social support networks and barriers to accessing education. Since arriving in Nairobi, 43.7 per cent of respondents had received help from an NGO. Nearly half of those were still receiving help.

Various NGOs and community-based organisations (CBOs) work with refugee communities to provide services. The Hebrew Immigrant Aid Society (HIAS) accounts for the highest proportion of services provided (28.9 per cent) followed by the UNHCR (21.3 per cent) and the National Council for Churches in Kenya (NCCK) at 13.2 per cent. The range of services offered by these agencies include medical support, education, food, accommodation/rent and documentation, as shown in Figure 12.

Provision of education and food are the most common forms of agency support, followed by accommodation/rent, medical support and documentation. Some refugees also received direct financial support and financing of small businesses in the form of grants. Resettlement services were the lowest at 3 per cent, perhaps due to global shifts in the relocation of refugees to other countries.

When disaggregated by duration of stay, newly arrived refugees were less likely to report getting agency support since arriving in Nairobi (25.3 per cent) compared with long-term refugees (49.5 per

Figure 12. Range of services offered by agencies working with refugees

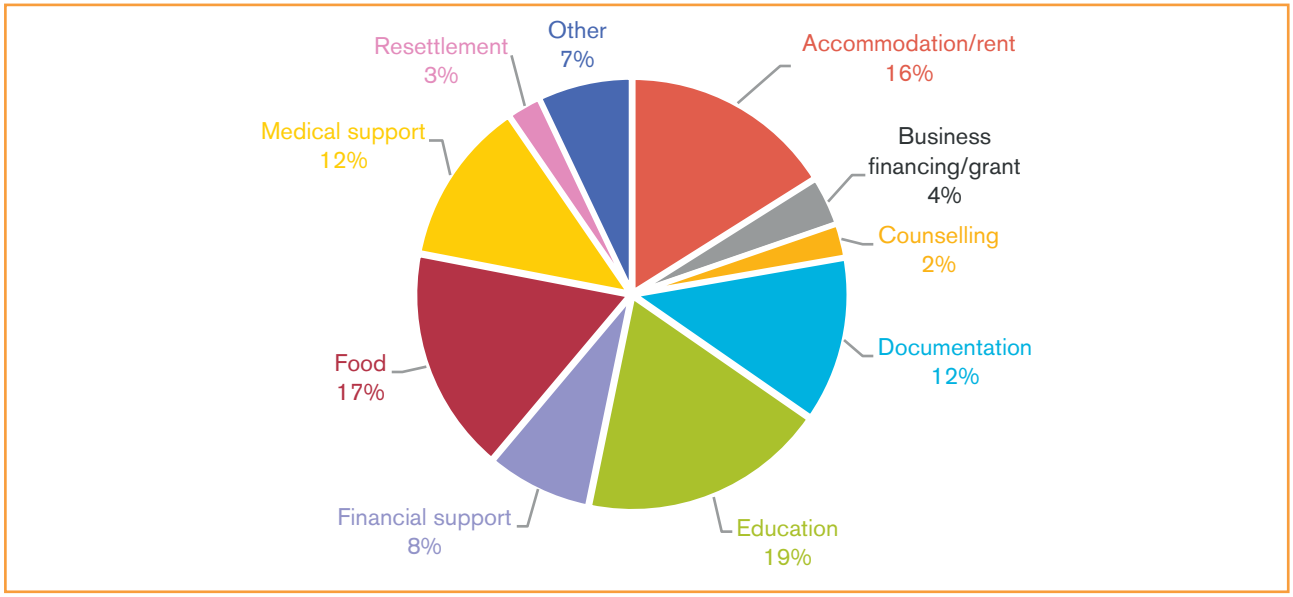
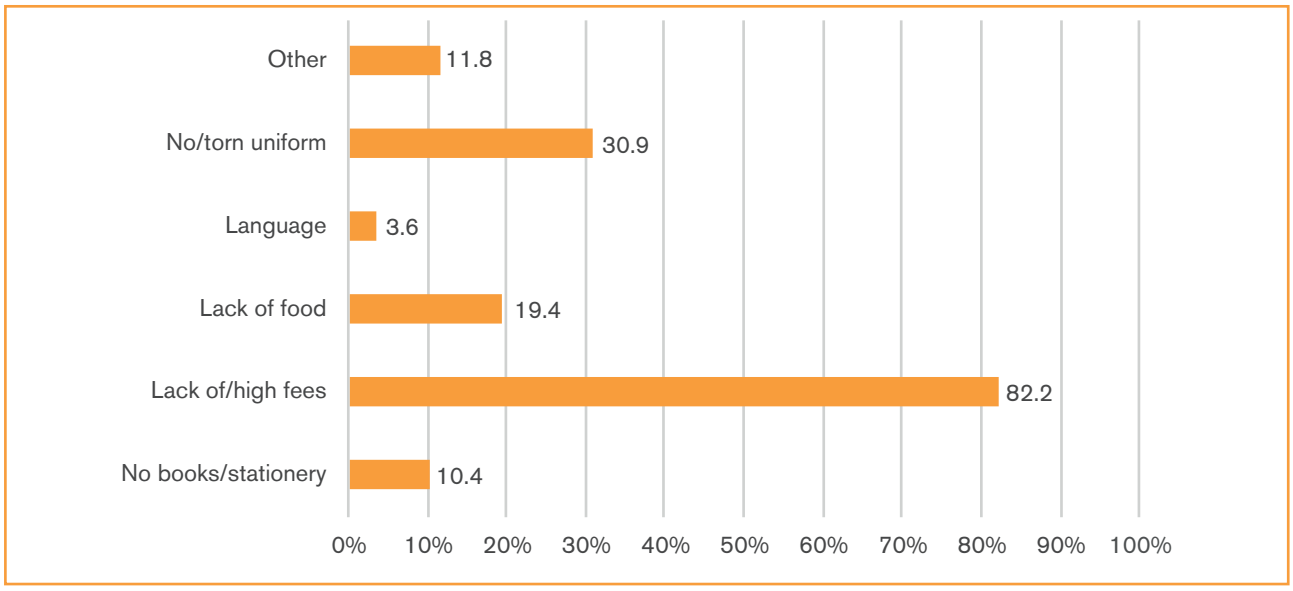


Figure 13. Barriers to accessing education



Multiple responses therefore percentage total exceeds 100 per cent

cent). Among those who had received support since coming to the city, only 35.3 per cent and 50 per cent, respectively, of newly arrived and long-term refugees were receiving some form of support at the time of the survey. When disaggregated by country of origin, the results indicate that Somali refugees were more likely to report having received agency support since coming to Nairobi (73.4 per cent) and to still be receiving this support at the time of the survey (65.5 per cent). Refugees from Uganda/Sudan were the least likely to report having received any agency support (30.8 per cent), while those from Burundi/Rwanda were least likely to be receiving support at the time of the survey (23.2 per cent).

Education was the predominant type of support received by DRC/Congo-Brazzaville refugees (38.2 per cent) while those from Burundi/Rwanda mostly obtained support for accommodation/rent (20.9 per cent) and education (19.4 per cent). For refugees from Ethiopia/Eritrea, documentation assistance was the leading support received (25.3 per cent) followed by food (22.7 per cent). Refugees from Somalia mainly received support for documentation (27.7 per cent) and accommodation (22.9 per cent). Those from Uganda/Sudan mostly received education support (25.0 per cent) and food (20.0 per cent).

5.2 Barriers to accessing education

Refugee families with school-age children were asked if there were any barriers to their accessing education (Figure 13), as well as the type of schools they attended. The majority were enrolled in public schools, followed by private formal schools. Private informal facilities had the lowest patronage. As with healthcare access, the cost of education (lack of money/high school fees) was a major barrier reported by over 82 per cent of refugees. The lack of a school uniform or one that was torn, lack of food at home, or limited funds to pay for school lunches were also important barriers. However, language was not an important barrier, as only 3.6 per cent of respondents cited this.

6

Conclusions and recommendations

We conducted our study at a time when Kenya's refugee population is officially on the decline (according to UNHCR), reflecting the voluntary return to countries of origin by some refugees, such as those from Somalia or Sudan. Refugees have long been associated with camps, yet they also form a significant part of the urban population. The number of Kenya's urban refugees is still believed to be substantial. And it is rising due to several factors, such as new arrivals from countries undergoing fresh conflict, previously encamped refugees moving into cities, and an unwillingness among urban refugees to take up the voluntary return offer (Campbell *et al.* 2011). The refugee policy favours encampment over the freedom to live and work across the country (National Council for Law Reporting 2006). But the harsh realities of life in refugee camps, located in Kenya's arid north, have often led refugees to move into cities like Nairobi and small towns.

Our study has found that not all refugees in Nairobi previously lived in camps, and some arrived directly from their home countries. As expected, most refugees living in Nairobi fled their countries due to war/conflict, although refugees from Ethiopia and Eritrea were typically escaping political threats. Nairobi remains an attractive city to many refugees and migrants who come either through existing networks in the city or by chance, as the final stop during their flight to safety. As the headquarters of most refugee agencies in Kenya, the city attracts many hoping to receive assistance from them.

6.1 Key findings

Access to healthcare is a key need for refugees, particularly considering their vulnerability in their country of origin and their often-perilous journeys to Nairobi. The drivers of displacement, especially war/conflict, often negatively affect healthcare provision. This leads to dysfunctional health systems at the country of origin, leaving many refugees in poor health. A refugee's journey to safety may result in further health problems, such as injuries, sexual and physical violence, and sanitation-related and vector-borne diseases like malaria while in transit (IOM 2011). When arriving at their destinations, refugees may already face various health problems that can be exacerbated when coming to cities without being officially registered (registration may allow immediate medical attention for refugees seen as deserving cases). By the time refugees settle into the city and understand its healthcare and transportation systems, their health may have suffered greatly.

Even when they manage to access healthcare in Nairobi, refugees often face various challenges such as high costs, lack of health insurance (including the NHIF card), lack of documentation and language barriers. Given the near absence of public health facilities in areas where refugees live, the private sector typically becomes their go-to provider. Public facilities can offer free or low-cost services, but private for-profit facilities charge higher user fees, leading those who cannot afford such services to look elsewhere for healthcare (including shops and traditional herbalists). And although some refugees can access services from agencies operating in Nairobi, these services are often only offered for a short duration.

Housing is critical given its impacts on health and well-being (Krieger and Higgins 2002) and many refugees cannot access adequate, safe housing or clean energy. In the study communities, respondents frequently occupied crowded, single-room houses

with inadequate infrastructure. Given the large number of occupants and unclean energy provision, many respondents experienced congested living conditions, an elevated risk of infectious disease transmission, and indoor air pollution. Considering that kerosene was the most commonly used cooking fuel, households likely face elevated levels of indoor air pollution and risk of burns due to stove explosions. Kerosene has previously been implicated in air pollution, in addition to the risks of burns and poisoning from ingestion (Lam *et al.* 2012a, 2012b). Other concerns included access to safe drinking water, both among refugees and particularly for residents of informal settlements. In Nairobi, water from vendors is usually of unclear quality and it is likely to be contaminated during the handling process.

Differences by nationality were noted in healthcare access, housing, and concerns about health. This indicates unequal disadvantages between Nairobi's different refugee communities. In particular, Burundian/Rwandese refugees are more disadvantaged in their access to housing, sanitation and water, suggesting that this group has poorer-quality shelter compared to other nationalities. Additionally, Burundian/Rwandese refugees constituted the highest proportion of respondents expressing concern for their personal and household health. Such disadvantages with respect to other nationalities could also indicate poorer social capital among Burundian/Rwandese refugees, in contrast with groups like Somalis and Ethiopian/Eritreans who are known to have strong social ties, which offer significant support.

Given the high costs of accessing healthcare and housing, it becomes critical for refugees to have the means to afford these essential services. Kenya's current restriction on their participation in waged employment is in contrast to the provisions for a work permit for refugees, either through waged employment or setting up businesses (Department of Immigration Services 2015). This calls for aligning the immigration provisions and current practice to ensure refugees have income-generation opportunities in Kenya, which can potentially improve various outcomes (including access to education, shelter and healthcare).

Refugees in Nairobi often rely on informal petty trading, but they still struggle to afford food and other basic needs. They also face official harassment and competition with locals. Qualitative data have shown how these forms of informal trade are unpredictable, with constant harassment from county government officials seeking fees for trading licenses. Additionally, hostile locals may feel that refugees should not engage in businesses that Kenyans can run. Refugees often have unstable incomes, which means they struggle to meet the needs of their (often large) households. Related challenges include costly school fees, inadequate access to food, difficulties in raising money for rent, and lack of school uniforms – all of which are directly affected by low incomes.

Importantly, our analysis of secondary data has highlighted that refugees' shelter and infrastructure challenges often resemble those facing residents of informal settlements. Slum dwellers in Nairobi again face elevated levels of poverty, few formal livelihood opportunities, and a lack of access to key services and infrastructure. In common with host communities, refugees live in small rented houses, usually one-roomed units, leading to overcrowding (particularly amongst refugees with large households). On the other hand, there were some differences noted between refugee households and the host community. Data on host communities came from Nairobi's typical slum neighbourhoods, while refugees in this study sometimes resided in slightly better houses with better access to water and sanitation. Further research is needed to compare the circumstances of refugees in informal settlements with those of their immediate non-refugee neighbours.

In conclusion, Nairobi's refugees face several overlapping challenges in accessing shelter, infrastructure and healthcare. But there are also differences between refugee communities. Kenyan restrictions on refugees' engagement in formal work have meant that many cannot meaningfully contribute to the local economy, nor can they foster their households' health and well-being. There is therefore a need for the government to reconsider the 'no work' policy that helps to place refugee households in precarious situations. Furthermore, the disadvantages faced by new arrivals and refugees with different countries of origin underscore the need for targeted programmes to reduce such disparities and to foster more inclusive urban trajectories.

6.2 Policy and programme recommendations

Despite Kenya's restrictive policy of encampment, it is likely that many of its refugees will continue living in cities to avoid the camps (either by directly moving into cities or leaving the camps to reside in cities). Several policy implications arise from the findings of this study.

- Kenyan authorities need to address the various barriers to health service access, including cost, documentation, and language. This can include providing refugees and service providers with clear information about how to use the NHIF card.
- Kenya's government should review its encampment policy and work restrictions that have resulted in low-paid work and precarious shelter for urban refugees. It should encourage formal livelihoods, generating benefits for refugees' health and well-being.

- Kenyan authorities must tackle inadequate, overcrowded housing and lack of services in low-income neighbourhoods to improve the health and well-being of refugees; local residents would benefit from the same improvements.
- To foster peaceful relations between host communities and refugees, policymakers can engage and empower refugees' groups and community organisations to work together, particularly those already active in Nairobi.
- Health service delivery models should cater for refugees and fellow residents in slums. Universal healthcare could be a rallying agenda for national and international agencies seeking to address urban refugees' exclusion from healthcare.

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Men, women and children who are forced to flee their homes often bear the mental or physical scars of conflict. Refugees' arduous journeys to urban areas and the conditions they encounter there can present further health challenges. In our study of refugees living in the Kenyan capital, participants named adequate healthcare and housing as essential needs that they struggle to meet. Many face significant obstacles to accessing healthcare, including cost, lack of documentation and language barriers. Living conditions are a linked concern: overcrowded housing with inadequate water, sanitation and energy can negatively affect refugees' health. With unknown numbers of refugees living in Nairobi's informal settlements and other low-income areas, conflict with host communities is also a well-being issue. This paper discusses the need to reduce conflict and dismantle the barriers that prevent urban refugees accessing the healthcare, housing and infrastructure they need.

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