KEY CONSIDERATIONS: Adherence to COVID-19 Preventive Measures in Greater Kampala, Uganda

SSHAP
Social Science in Humanitarian Action Platform

This brief sets out key considerations for risk communications and community engagement (RCCE) to promote adherence to COVID-19 preventive measures in greater Kampala, Uganda. It looks at adherence to COVID-19 preventive measures, assesses the challenges to their adoption and outlines key considerations for partners working in RCCE and the wider COVID-19 emergency response. The brief responds to concern (as of March 2022) about COVID-19 transmission in informal urban areas in Uganda due to their high population density, limited sanitary infrastructure, and reported low uptake of vaccination. Ensuring effective communication and engagement with a series of preventative measures is essential in limiting the spread of COVID-19. The Ministry of Health and response partners have been proactive, however interventions and guidance for COVID-19 have taken limited account of social science research about the perceptions and practices related to COVID-19 regulations. This brief aims to address this gap so these data may be used to inform more effective and practicable guidance for vulnerable groups.

This brief draws primarily on an analysis of existing scientific and grey literature. Additional primary data was collected through consultation with six social science and RCCE experts who focus on this geographical area. The brief was requested by UNICEF Uganda in consultation with the Uganda Ministry of Health (MoH) RCCE subcommittee and the RCCE technical working group for the Eastern and South Africa region (ESAR). It was developed for SSHAP by Theresa Jones (Anthrologica) and supported by Elizabeth Storer (London School of Economics), with contributions and reviews by colleagues at Anthrologica, the Institute of Development Studies (IDS), UNICEF ESARO and Uganda, Makerere University, the London School of Hygiene and Tropical Medicine (LSHTM), Dreamline Products and the IFRC.

KEY CONSIDERATIONS

- Residents of informal settlements in Kampala face a range of competing health and socio-economic concerns. Their need for money, food and shelter is often a more immediate worry than COVID-19 infection, and this can affect their adoption of preventive measures. This needs to be acknowledged and addressed when managing vaccine distribution, COVID-19 preventive action, and tailored communication strategies. Government should be engaged on these matters and the establishment of social safety mechanisms and emergency assistance programmes should be encouraged.
- RCCE actors are working in a highly politicised context. The uptake of COVID-19 prevention measures should be facilitated by a range of authorities, including community and business organisations, the Uganda MoH and the Kampala City Council Authority (KCCA). The MoH is best placed to coordinate service provision across informal areas in Greater Kampala, but the possibility of mistrust in other government authorities should be recognised.
- Vaccination is crucial to decreasing the transmission of COVID-19 in urban Kampala. RCCE actors should prioritise disseminating real-time information on vaccine availability and locations to improve access issues. They should emphasise that COVID-19 vaccines are free and available to all adults.
- Vaccination points should be established at locations that can be conveniently accessed by informal settlement residents. These include markets, minibus taxi parks, worship facilities, busy streets, *boma* grounds and other centre city locations. Communications should emphasise that vaccines administered in these locations are the same as those in hospitals and upscale residential areas such as Kololo.

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- Communications about vaccination should address this population's unanswered questions, including concerns about vaccine safety and side effects and the mixing of vaccine types. Emerging misinformation about vaccines should be tracked and innovative approaches developed to dispel associated vaccine hesitancy.
- RCCE efforts must consider the disparities in service provision in informal settlements. Pending necessary government investment in these areas, NGOs may be able to provide certain improvements and/or needed resources, such as installing water systems (and providing for their maintenance) and increasing the amount of safe water provided to urban poor communities.
- Currently, individuals and businesses comply with recommended COVID-19 prevention measures, such as mask-wearing, because they are required and enforced. RCCE efforts should focus on encouraging people to see these measures as a new 'way of life' that benefits them and their fellow citizens and will have long-term positive effects.
- Communication about COVID-19 needs to take a realistic approach to people's ability to prioritise viral risks above other socio-economic risks. Messaging should target preventive action that can be interwoven with the type of movement and mixing upon which livelihoods rely. RCCE actors should emphasise that preventive measures can help avoid another lockdown, which may provide particular motivation to formal and informal business owners.
- The psychosocial effects of the pandemic have not been experienced equally across demographic groups in Uganda. For example, particular groups in urban settings – especially those who are already marginalised – have been stigmatised and ostracised because they are blamed for importing COVID-19 to the city. Further mapping should be conducted to understand how this affects differential adherence to COVID-19 preventive measures.
- RCCE strategies should be tailored to the diverse groups living in Kampala and developed in consultation with them. For example, informal workers need to know about how to work safely in their specific jobs (e.g., how to prepare and sell food safely, how to work in closed markets safely). Care should be taken that RCCE communications do not stigmatise informal settlement dwellers, particularly refugees.
- The informal sector dominates urban Kampala and includes busy markets, taxi parks, motor cyclists/*boda boda* drivers, shopping centres, and garages. Informal, influential self-governing bodies and networks exist and should be better engaged to initiate preventive measures in the workplace and encourage their workers to take up COVID-19 guidance.
- Messages need to be delivered by people who are recognised as legitimate figures of public authority. Grassroot leadership structures, including religious and cultural leaders, *boda boda* driver group leaders, market chairpersons and other market sub-leaders, are effective channels for spreading actionable information on COVID-19 preventive measures. RCCE actors should map the specific personnel who are trusted and listened to and then work with these individuals to be direct communicators and positive role models for the wider public around preventing COVID-19.
- Social peer groups found in community membership associations (e.g., village savings and loans associations) or the workplace can be enlisted by RCCE actors to help drive community adoption of preventive measures. Champions and peers, including those who have taken the vaccine, should also be encouraged to speak positively and publicly about their experiences.
- The urban population of Kampala accesses COVID-19-related information on TV, radio, social media, and social networks. Accurate information should be made available across all platforms. RCCE actors should deploy innovative approaches, including street entertainment and digital screens in public places, whilst creating opportunities for two-way communication such as through community dialogues. Information should be made available in languages other than English and Luganda, especially non-Bantu languages such as Luo, but also in Arabic and Somali and other languages spoken by refugee populations.

BACKGROUND

Greater Kampala is defined as including Kampala, Mukono and Wakiso districts. This brief draws specifically on data collected from within informal settlements in this broad urban zone, as well as related areas across Kampala that are regularly accessed by residents, including markets, shops, public transportation, entertainment spots, places of worship and workplaces.

This section outlines the current COVID-19 preventive measures recommended by Uganda's Ministry of Health (MoH) as of February 2022. It then describes the urban Kampala context and its specific implications for the spread of COVID-19. It concludes with a brief review of the existing evidence on adherence to preventive measures.

COVID-19 prevention in Uganda

Between 3 January 2020 and 11 February 2022, Ugandan's reported cumulative COVID-19 cases reached 162,639, with 3,575 deaths. As of February 2022, all Ugandans over 18 years were eligible for first and second doses of the COVID-19 vaccine, and a total of 14,973,293 vaccine doses had been administered.[1] Data collected by the UNICEF U-Report digital platform and published in April 2021 shows that 94% of respondents sampled in Kampala, Wakiso and Mukono districts have heard of the vaccine and 73% would take it if recommended to them.[2] Although vaccine acceptance may be high in urban Kampala, availability and distribution issues mean that a relatively modest 56% of residents have actually had two doses of the vaccine.[3]

Box 1. Standard Operating Procedures

The Government of Uganda refers to the measures it endorses to prevent the spread of COVID-19 as 'Standard Operating Procedures' or 'SOPs'. Used throughout the response, the term has now also been adopted by citizens. Despite its ubiquity, there is confusion about the exact meaning of 'SOPs'. There are more effective terms that RCCE actors can use when communicating with urban residents in Kampala that link to specific forms of prevention. In this brief, we use the term 'COVID-19 preventive measures'.

In addition to promoting vaccination, the MoH advises adherence to preventive measures. On its website, the MoH provides resources to help the public recognise and prevent the spread of COVID-19. As of March 2022, the MoH recommended public adoption of the following preventive measures:

- Wear a face mask properly, always covering the nose and mouth while in public.
- Maintain a distance of at least 2 metres (6 feet) between persons.
- Regularly wash hands with soap and running water or use an alcohol-based hand sanitiser.
- Avoid public gatherings and crowds.
- Avoid hand shaking and hugging.
- Get vaccinated when eligible.

Several sets of context-specific guidelines relevant to urban Kampala have also been developed by the MoH. Guidelines to prevent the transmission of COVID-19 in public places state that urban authorities, employers, managers, and owners of premises must: 1) conduct temperature screening of all individuals accessing the premises; 2) provide hand washing facilities and ensure that these are used by people accessing the premises; and 3) ensure that work areas are clean, hygienic and regularly cleaned with disinfectant (in place as of February 2022).[4] Specific guidelines also exist for preventing COVID-19 in market-places, schools, churches and work places, when using public transportation, and for conducting 'safe' mass gatherings.[5-6]

Urban living in Kampala

About 60% of the urban population in the city of Kampala lives in areas that are defined as informal. The National Urban Policy of 2017 notes that the absence of a comprehensive urban policy has led

to rapid and unplanned growth of informal settlements throughout the city.[7] In Kampala, informal settlements are widely dispersed throughout the city, not concentrated in pockets as in Nairobi or Kinshasa. Whilst many informal settlements date from the colonial period and are inhabited predominantly by Ugandan citizens, other settlements have been established more recently. This is due in part to refugee migrations from East and Central Africa. In 2021 Kampala was home to over 120,000 refugees;[8] the largest refugee population is from Somalia and resides in Kisenyi, Rubaga division. Other refugee populations include people from Ethiopia and Eritrea, mainly living in Mengo and Kabusu; from the DRC living in Katwe, Nsambya and Makindye; from Ethiopia, Eritrea and South Sudan living in Kansanga, Kabalagala and Seeta; and from Burundi living in Namungoona and Nabulagala.[9]

Kampala is a spatially integrated city with intense traffic between residential and other zones. Urban dwellers often move between urban zones every day—presenting a risk for the transmission of COVID-19 across the city. Many inhabitants of Kampala's informal settlements are young and have migrated to the city for work. The informal sector is prominent and tends to be where residents of informal settlements find work. Jobs include street vending, taxi and *boda boda* (motorbike taxi) operation, construction, petty trade and other casual work. Informal workers depend on daily wages to survive,[10] highlighting the significance of mobility to livelihoods. Work in the informal sector is heavily gendered. Whilst *boda boda* workers are generally male, a large proportion of solo street traders, market workers and domestic workers are women. Parts of the informal sector are self-governing and regulated through associations and committees.[11]

Class distinctions in Kampala are reflected in housing structures. Patterns of tenure across informal settlements include squatting, renting and, sometimes, possession of a land title. Housing stock is often of poor quality and relies on gradual upgrading by inhabitants. Many migrants arriving in Uganda opt to live with extended family or acquaintances, causing overcrowding of dwellings. Informal settlements are generally characterised by poor infrastructure, including lack of clean water, obsolete or absent sewage systems, illegal electricity connections, poor ventilation, and inadequate sanitary facilities.

Informal settlements can also be spaces of political activity. They are spaces where many express extreme resentment and distrust of the ruling party. Over recent years, informal settlements have been the sites of violent stand-offs between government military and police, and opposition supporters.[12,13]

Adherence to COVID-19 preventive measures: Existing Evidence

Available evidence from urban Kampala suggests the adoption of COVID-19 preventive measures has been uneven. A survey conducted in August and September 2021 by UNICEF and Dreamline Products amongst 147 people living in informal settlements and markets in Kampala, Mukono and Wakiso districts found that wearing face masks was the most widely adopted preventive measure (59%), followed by handwashing (29%) and physical distancing (7%). Adherence also varied by locality. For example, respondents from Wakiso district reported higher levels of handwashing than other areas.[14] Adoption of preventive measures also varies according to the context. More than 60% of respondents in a 2020-21 survey conducted by Twaweza East Africa in Kampala, Kyotera, and Tororo reported that churches were adhering to prevention measures, whereas only 35% of respondents said that these measures were followed at social gatherings such as weddings, in markets, and in bars.[15]

The results reflect wider patterns in Uganda. One recent study based on national-level data also found that mask-wearing was the most widely adopted preventive measure, with over 60% of respondents reporting that this practice was adopted in their locality. Fewer than 40% of respondents reported that handwashing and physical distancing were practiced in their locality.[2,16] Self-reported adherence to handwashing and physical distancing practices declined between August and December 2021. Self-reported adherence to mask-wearing initially declined between August and September 2021, but then went up between October and December 2021.[19] People's reported adherence appears to respond to changing rates of infection: when infection rates are high, people use masks, but then relax when infections are going down.[17]

The data also suggest that knowledge of COVID-19 measures does not necessarily lead to adherence. For example, although uptake of most preventive measures appears to be generally low, knowledge about them has increased since the first lockdown and can be considered as high.[18] A survey of 2500 in- and out-of-school adolescent boys and young men in urban Kampala found that 74.9% of respondents knew how COVID-19 was spread and 80% of respondents were aware of at least two COVID-19 prevention measures. Yet among this population uptake of preventive measures, including wearing face masks and avoiding crowds, was low.[19] It is important to note that much of the available evidence relies on self-reported surveys and does not attempt to assess possible disparities between survey responses and actual behaviours.

There is also concern that individuals may 'follow' suggested preventive measures in ways that do not mitigate the spread of COVID-19. For example, although masks are reported to be widely used in Kampala,[20] they are often worn inconsistently and incorrectly--for example, not properly covering the nose and mouth, or resting on the chin.[21]

CHALLENGES TO UPTAKE OF PREVENTION STRATEGIES

There are multiple potential challenges to adoption of COVID-19 preventive measures in urban Kampala. This has implications for the work of RCCE practitioners and the wider COVID-19 response.

Risk Perception of COVID-19

How people understand COVID-19 affects their adherence to preventative measures. Evidence suggests that COVID-19 denialism, present during the early months of the pandemic in 2020 and particularly among young male Ugandans, has largely subsided as caseloads and mortality rates have increased.[22] In addition, public health messaging during the early stages of the pandemic compared the symptoms of COVID-19 to a 'flu'; as a result, many Ugandans sought herbal medicines and turned to 'steaming' practices as both prevention and cure for COVID-19.[23] Studies indicate that the use of herbal cures is often linked to the abandonment of clinical guidelines.[24]

For the first year of the pandemic, COVID-19 was understood to be disease of 'outsiders',[25] particularly Asian and Caucasian people. In Kampala, the first cases were recorded among those returning to the country from Dubai, and initially stigma was directed towards Asian construction workers, as well as Kampalans perceived to have interacted with Euro-American and Asian colleagues and associates. This is important, because it promotes ideas of African immunity and consequently leads to reluctance to follow preventative measures. The national Risk Communication Social Mobilisation and Community Engagement (RCSM-CE) strategy advocates focussing on collective responsibility rather than only on personal responsibility.[26] However, it is important to recognise the risk that promotion of blanket collective responsibility could cause the urban poor and other marginalised groups to believe they are being asked to make sacrifices and follow preventive measures in order to protect outsiders, or to believe they are being blamed for spreading the virus. This could undercut their motivation to follow recommendations.

Similarly, health messaging initially portrayed COVID-19 as a disease that primarily affects or kills the elderly and those with co-morbidities. This may influence the behaviour of those who perceive themselves at low risk and therefore may be less motivated to adopt protective measures. The demographics of informal settlements is significant here: They are inhabited by a primarily young population who often reside in multi-generational households that often include older, higher-risk relatives.

Access to accurate information has been identified as a challenge for Kampalans considering vaccination. Many Kampala residents are unsure if COVID-19 vaccines are available and whether they cost anything. Misconceptions about the distribution and efficacy of COVID-19 vaccines are pervasive, but so are basic unanswered questions and concerns. The common reasons behind unwillingness to take the vaccine in Kampala, Wakiso and Mukono districts include fear of side effects--which is reportedly more of a concern for women than men--and doubts about effectiveness.[2]

In Wakiso and Mukono districts there is also concern that the vaccine might be bad for one's health.[2] Vaccine coverage is not likely to improve without detailed messages that acknowledge the complexity of the situation, including the uncertainties in existing scientific evidence.

Economic challenges

People working in urban spaces in Kampala often do not view COVID-19 as the priority problem in their lives. The urgent need for money, food, and a place to sleep can override concerns about COVID-19 infection[17,27] and reduce the likelihood of adherence to preventive measures.

Avoiding crowds and maintaining a physical distance is simply not an option for most informal workers in Kampala. Survival for many of Kampala's residents depends upon operating small and/or informal businesses, which are often located in highly congested areas of the city including markets, restaurants, bars, and salons.[21] Employed in poorly paid and insecure occupations, few residents of informal settlements can invest in COVID-19 prevention or avoid mixing when COVID-19 infection rates are high.

Uganda's lockdown measures (April-May 2020 and June-July 2021) magnified existing economic hardships. Ten percent of urban residents said that they did not work because of the lockdown.[28] In Kampala, the first lockdown was debilitating and eroded people's savings. When the second lockdown began, many did not have savings to rely on and food insecurity sharply increased. Jobs such as street vending, taxi and *boda boda* driving, and other casual work were reportedly lost during Uganda's two lockdowns.[29] Kampala's female informal workers have faced additional challenges, as their loss of income coincided with increased care and domestic responsibilities.[30] Women are often the sole earners in a family, so their loss of income can affect the entire family, including dependent children.[31]

The cost and availability of materials such as masks, sanitisers, and soap are identified as potential obstacles to following recommended prevention measures, even without taking into account pandemic-related lost income.[32] People operating in markets reported that they cannot afford to follow the guidelines; the cost of adhering to these measures are often out of reach for informal workers who may earn between US$2-3/day. The *'economic burden'* of these preventive measures is felt most by those of a lower socio-economic status.[33]

Environmental and situational challenges

ENFORCING PREVENTION IN HIGH-RISK URBAN ZONES

Specific high-risk settings–including marketplaces, shops and other spaces associated with informal work—may present particular and significant challenges to following COVID-19 preventive measures. This may be due to practical difficulties, lack of enforcement, or both. In a recent national-level survey, markets were flagged as a potentially high-risk location, with 20% of COVID-19 positive patients having visited them in the 14 days before symptom onset.[34] Many informal residents pass through these spaces during the day, and markets are often spaces where mistrust of the police is high and external enforcement of COVID-19 has largely been ineffective.[21] The informal settings are often regulated by extra-governmental entities, and workers and businesses may therefore not feel constrained to follow and enforce COVID-19 prevention guidelines.

From a practical perspective, it is difficult for people to comply with COVID-19 preventive measures (such as maintaining physical distance) in Kampala's busy markets and garages because of the very limited space occupied by these entities. Due to high land values, businesses often occupy small buildings and/or outside plots.

Urban transport operating from taxi and bus parks in urban Kampala can also present high risk of transmission. Like the markets, these sites initially instituted preventive measures, but compliance has since waned.[21] Many taxi drivers were reportedly wearing masks while waiting at the stage and in the taxi but removing them after departure. This suggests that the rule is followed because it is required and enforced, rather than it being *'an adopted and appreciated way of life'*.[21] Whilst transport

operators claim to have reduced the number of passengers as required by the MoH, members of the public say this is rarely the case.

Bars and nightclubs reopened in January 2022 after being ordered closed in March 2020.[35] The often-cramped space and availability of alcohol makes these high risk zones for the transmission of COVID-19. Bars and nightclubs have demonstrated low adherence to preventive measures. For example, when they were supposed to be closed, numerous small informal or unregulated bars continued to operate without precautionary measures in place. Some businesses began offering a few food items to enable them to qualify as restaurants and thus reopen. Although the front doors of clubs were closed, the back doors were often open for 'lock-ins', where patrons who could afford it paid the club to open for them.[20] There have been media reports that police officers who are supposed to enforce bar closures instead patronised the bars.[36]

DWELLING AND SANITARY INFRASTRUCTURE

According to the 2014 National Population and Housing Census, the urban population is more likely than the rural population to live in dwellings with a single room (57% urban vs. 44% rural).[10] Kampalans are often drawn to reside in informal settlements due to prohibitive rent costs elsewhere in the city. Young people often stay with extended family members or associates in the city, though many moved back to their villages during the lockdowns. With prolonged school closures during the pandemic (see below), there is significant overcrowding in these multi-generational homes. Popular messages around COVID-19 preventive measures, including #Tonsemberera (Keep a Distance), may not be feasible for those who must live and seek livelihood in crowded spaces.

Most of Kampala's informal settlements lack infrastructure for water and good sanitation. This presents additional challenges to adopting and maintaining certain COVID-19 preventive measures. Frequent handwashing is difficult for those who have limited access to soap and clean water and who are unlikely to spend their limited resources on establishing these facilities.[10] It is also difficult to keep a physical distance in an environment with shared water points, pit-latrines, and bathrooms.[10] Temporary public handwashing stations were set up at markets by NGOs as part of their COVID-19 programming, but in the absence of a structured system to repair them, buy soap or refill water consistently, they stopped working.[17] Research conducted amongst urban refugees in Kisenyi, Kampala has highlighted the need to improve water systems and to redefine the standard amount of water recommended per person per day to allow for frequent washing of hands.[37]

Along with these well-known challenges, several informal urban areas are affected by landslides and seasonal flooding. Many of Kampala's unplanned developments are in low-lying areas, which are prone to frequent and severe flooding.[38] Seven months out of the year (January, March, April, May, October, November, and December) have high rainfall. During these months, it is common for families affected by flooding to move in with other families, placing further pressure on housing capacity. Flooding also impacts the availability of clean running water for handwashing.

Psychosocial challenges

Greater Kampala residents and workers faced multiple challenges during the two lockdowns, including limited access to food, drops in daily income, loss of employment and an increase in domestic violence.[39] Uganda's lockdowns were stringent and, whilst deemed necessary to contain the spread of COVID-19, these measures have presented extreme difficulties for Kampala's urban poor. Reportedly, the legacy of these lockdowns is increasing demotivation among the urban populace to continue following COVID-19 preventive measures.[40]

Primary and secondary schools in Uganda have been closed for nearly two years. Whilst actual enrolment figures were not available at the time of writing, it was projected around the time of school reopening (10th of January 2022) that nearly a third of students would not be returning.[41] The shut down and drop-out rate from schools have had immediate repercussions. Parents face additional pressure to feed children who previously received at least one meal at school. Teenage pregnancies also increased sharply during the pandemic: District Health Information System (DHIS-2) data shows a 17% rise in teenage pregnancies between March 2020 and June 2021.[42] The impact has been

particularly severe on poor and rural families; many parents remain dependent on their children's help in the informal economy and cannot afford school fees.[45]

COVID-19 has directly impacted the mental health of people living in urban Kampala. Sixty percent of 2,500 adolescent boys and young men surveyed in Kampala reported feeling *'nervous or sad that nothing could cheer them up as a result of COVID-19*.[22] A study conducted amongst university students during lockdown found a high prevalence of depression (80.7%), anxiety (94.8%) and stress (77.9%).[43] Whilst this is a concern in itself, mental health problems have been linked to lower adoption of preventive measures, including resistance or indecision towards being vaccinated against COVID-19.[44] This is a vicious cycle, as COVID-19 preventive measures themselves, including physical distancing and lockdowns, have been found to increase levels of stress and anxiety.[45]

Psychosocial effects have not been experienced evenly. For example, particular groups within urban settings have experienced stigma and ostracisation in relation to importing COVID-19 to the city. Often, groups already at the margins of informal settlements have been subject to new forms of discrimination. For example, refugees are often perceived as *'importers of COVID-19'* and have reportedly experienced increased levels stigma and isolation from the general population.[46] Further mapping should be conducted as to how social ostracisation affects adherence to COVID-19 preventive measures.

Trust and confidence

A lack of trust and confidence can influence what information people believe or act on. In Uganda, the degree of satisfaction with the government's response to COVID-19 has been associated with adherence to preventive measures.[36,47] Lack of trust in the government was the second most common reason given by Kampala residents who said they were unwilling to take the vaccine.[2] Lack of trust and confidence may be aggravated by government actions in Kampala city, where street hawkers are being removed and shops are being demolished to reduce congestion. This is pushing vulnerable people further to the margins.[48] It also means that RCCE actors are working in a highly politicised context.

Since the onset of COVID-19, some high-profile leaders have publicly flouted COVID-19 preventive measures. This includes reports of politicians holding large and crowded rallies during the peak of the pandemic, which created doubt amongst some members of the public about the seriousness of COVID-19 and the need for preventive measures.[49]

Police enforcement of COVID-19 preventive measures is likely to have exacerbated negative attitudes and mistrust. Incidents of disproportionate violence from security forces and law enforcement officers have been reported.[50] Street vendors have been arrested and beaten and their merchandise has been confiscated.[51] Where there is compliance with preventive measures, it is often because people fear punishment rather than because they have adopted these measures as a new way of life.[20] However, there are significant gaps in the data to explain people's experiences of the government's enforcement of COVID-19 preventive measures, which presents a challenge to fully understand the impact of trust and confidence on adherence.

Despite this emerging backdrop of mistrust, this has not necessarily equated to mistrust of the MoH itself. It has been reported that public health advice is viewed as objective, and that the MoH is trusted with regard to its handling of the COVID-19 pandemic.[52]

Service provision

Trust also relates to the provision of services and welfare. Throughout the COVID-19 pandemic, there have been inconsistencies and perceived failures in the provision of necessary services to support the uptake of COVID-19 preventive measures. This contributes to further loss of trust and confidence and complicates adherence.

MATERIAL SUPPORT FROM GOVERNMENT

During the first lockdown, the government promised to provide food relief, masks, and radios for home study for children.[53] Food donations were promised for the 'hand-to-mouth' urban Ugandans

whose livelihoods had been disrupted by the stringent lockdown. It was announced that the government would *"discuss with banks, electricity and water companies in connection with the loans and bills to loosen their grip on non-fulfilment of payments during this difficult period"*.[54] This type of accommodation was essential given that modern social protection structures are limited in Uganda. The government did distribute some food and masks; however, these did not reach all those in need and were considered severely inadequate and often of poor quality.[55] The country's relief effort was further punctuated by reports of corruption and politicisation ahead of the 2021 general elections.[5,6]

Many informal workers reported not qualifying for social support and emergency assistance programmes. These included the provision of food to the vulnerable in urban areas, continuation of the Social Assistance Grants for Empowerment (SAGE) Scheme, and an expansion of labour-intensive public works programmes.[55] This left people with no choice but to go back to work in crowded and high-risk settings, despite a ban on working in such settings, especially during the first lockdown.

VACCINATION AVAILABILITY AND DISTRIBUTION

Kampala residents are generally willing to be vaccinated against COVID-19.[2] However, COVID-19 vaccination is hindered by availability and distribution issues.[56] Due to global inequities, Uganda has not received or been able to purchase sufficient supplies of the vaccines, and many of those donated have a short shelf life.[57]

The primary bottlenecks at present are systemic. These include the logistics required for cold-chain storage and for distributing the vaccine. Slow and bureaucratic systems have delayed the transfer of money to pay allowances to mobilisers and vaccinators. Many informal settlements have refugee populations who are excluded from health services if they do not have identity cards. Ensuring timely supply and uptake of the second dose for certain types of vaccine, like the Astra Zeneca vaccine, requires planning ahead for a second dose. MoH Call Centre data suggests that people are concerned and confused when they fail to get their second dose within the designated period and/or when the second dose is a different type of vaccine.[58]

In a reflection of these distribution challenges, 29% of respondents to a U-Report poll in Kampala, Wakiso and Mukono districts reported that accessing vaccines was 'not easy at all'.[2] Even at mass vaccination sites like Kololo Air Strip, people may wait in long queues and may find that there is a lack of vaccine supply at the end of that wait.

CURRENT RCCE APPROACHES

Uganda has a long history of managing epidemic threats, including HIV/AIDS and Ebola. This history has created a sophisticated response mechanism that can be rapidly mobilised to introduce preventive measures and communication strategies. Building on these existing resources, the government of Uganda has used several channels to communicate updates about COVID-19 prevention. These include regular TV and radio briefings, often by President Museveni himself, and COVID-19 guidance published on the MoH COVID-19 webpages and the government of Uganda's COVID-19 website. The MoH also engages with Ugandans via social media channels; for example, the MoH has been participating in a vaccination drive on Twitter that targets bar and restaurant staff to address the specific risks posed by reopening their venues. The government has also frequently disseminated talking points about COVID-19 preventive measures to the media.

The Health Education and Promotion (HPE) department in the MoH, with support from implementing partners, has produced mass media and social media messages including 'Frequently Asked Questions' (FAQs) on COVID-19 Vaccines for the General Public'. Village Health Teams (VHTs) continue to mobilise and educate communities on the basics about COVID-19 and the importance of preventive measures. Vaccine campaigns using VHTs, mobile teams, and film vans are also currently running to encourage people to take the COVID-19 vaccine.

UN agencies and NGOs run additional RCCE activities in urban Kampala to promote the uptake of COVID-19 preventive measures. Activities include TV and radio spots and talk shows, social media

posts and distribution of print IEC materials. Multiple partners support these community engagement and social mobilisation activities, including UNICEF, WHO, USAID-SBA, CDC-IDI, who work in collaboration with implementing partners like the Uganda Red Cross Society, World Vision Uganda, and members of the Private Sector Foundation. The national RCSM-CE strategy recommends the use of hotlines (text and talk), SMS, interactive voice responses via social media and call-in radio shows with key influencers, megaphones and mobile vans in congested places like urban Kampala.[29] The District COVID-19 Task Forces have served as a useful point of coordination for district-level RCCE activities.[17]

The private sector has been actively involved in messaging to the wider public to promote adherence to COVID-19 preventive measures, especially uptake of the vaccine. For example, some breweries and soft drinks companies have hosted events where they specifically advertise the main event to be vaccination.[51] MTN Uganda have also supported several campaigns, such as handwashing and mask-wearing campaigns, to mitigate the spread of the virus. A major motivator for the private sector is to avoid another lockdown, as this would be catastrophic for many businesses.[21]

Larger-scale and intensive RCCE 'pushes' in urban Kampala have included a UNICEF-supported project with Dreamline Products. Project activities included sharing COVID-19 messages by megaphone, engaging popular DJs and radio station owners and owners of informal community radio/radio towers, integrating COVID-19 messages into the sermons of street preachers, and setting up large digital TV screens in congested parts of Kampala. This latter activity was initiated to promote the uptake of preventive measures in Kampala in June and July 2021, when there were concerns about particularly low adherence to mask-wearing and social distancing. These initiatives appear to be effective, but they are resource intensive and should be reserved for moments of particular need. Moving forward, RCCE actors in Kampala aim to support the work of the KCCA and Mukono City Authority.[43] In the following section, this brief suggests some of the influencers and channels that could be important as these efforts move forward.

Given the reported fatigue around COVID-19 prevention methods, it is important that new incentives and investments focus on boosting people's energy and drawing attention to the continued importance of prevention strategies. RCCE actors must keep information up to date to ensure continued compliance with prevention measures, and must continue to build on, and adapt, examples of success.

MOVING FORWARD: INFLUENCERS AND CHANNELS

INFLUENTIAL INDIVIDUALS, LOCAL STRUCTURES AND CULTURAL INSTITUTIONS

Communication strategies for COVID-19 prevention must consider the political climate in informal settlements. Grassroot leadership structures are likely to be the most effective channels, at present, for effectively communicating in urban Kampala. Grassroots leaders, including religious leaders, elders and chairpersons of savings groups, have more direct knowledge of their people's concerns and priorities and may be best placed to reach them.[17] Local land and business owners should also play a key role as they can be seen as particularly authentic and trustworthy.[17] It is important to provide training on correct health practices, to consistently fund these positions, and to make explicit in job descriptions the additional responsibilities related to spreading COVID-19 prevention messages.

Given the mobility of informal settlement residents, it is important to target workplaces as well as community or resident associations. Often, there are self-governing bodies within the informal sector, such as *boda boda* group leaders, market chairpersons, and other market sub-leaders (e.g., leaders of vegetable vendors etc). Different types of work and different trades are regulated to varying extents and through varying leadership structures. Evidence suggests that informal sector entities with strong leadership have better enforcement of preventive measures.[21] For example, *boda boda* group leaders have enforced sanctions when measures are ignored and have reportedly bought soap or sanitiser for their stages.[21]

Local and religious leaders are highly trusted in Uganda. They have been effective at creating awareness and behaviour change around other epidemics, including HIV,[59] although they have been less commonly consulted for the COVID-19 response. They have been influential when engaged, however, as when prominent religious and cultural leaders recorded audio and video messages that were shared national and local media across the country.[43] More substantial partnerships between RCCE actors and these personnel may now be important.[36] For example, religious leaders can more systematically disseminate information during services and enforce measures in their places of worship.[21] Other community-based organisations may be valuable liaisons with specific population groups. For example, the Association of the Somali Community in Uganda has been instrumental in engaging it members in the Kisenyi area of Kampala, including translating key COVID-19 information into Somali.[40]

In Kampala, it is important to engage the Buganda leadership, including the Kabaka (the Buganda King), the county chiefs, and multiple sub-chiefs (local cultural leaders), who can spread information effectively through word of mouth and through their own TV station, CBS.[17] These leaders are a 'fresh' source of information that can help overcome some of the pandemic fatigue.[20] Trusted influential leaders can help facilitate a shift away from riskier norms and traditions – for example, to replace hand-shaking with waving or fist bumping, to limit burial group sizes, and to forego the laying on of hands when praying for the sick. Working through cultural institutions like Buganda leadership may also help avoid politicisation of Kampala's pandemic response and help facilitate its sustainability.

Influence varies by location. Religious and cultural beliefs are particularly influential for preventing COVID-19 in Wakiso district, whereas village leadership and peer influence may be more important in Kampala and Mukono districts.[60] The relative religious and cultural diversity in Kampala may lessen the overall influence of these factors.

Community-driven compliance and a community-based level of enforcement is now important to lead to a more voluntary adoption of preventive measures. These local structures, cultural institutions, and other influencers can educate and support, as well as enforce, the adoption of preventive measures. Encouraging leaders to act as positive role models by consistently and publicly following and supporting the preventive measures is key. This process has been referred to as '*building model leadership for social change'*.[17] During the initial days of the COVID-19 response, local leaders and other stakeholders who attended meetings on COVID-19 matters were paid some allowances. This has since stopped – and leaders have lost the motivation to fulfil their role.[21] These individuals and institutions may need financial and logistical support to motivate and sustain them.[17] Urban settlement dwellers in Kampala trust their local associations and therefore involving these organisations will ensure that community needs are taken into consideration and that actions are tailored to community-specific risks.[41]

PEER GROUPS

It can be important for RCCE actors to tap into peer groups of different kinds. In Kampala, members of formal and informal groups (such as Village Savings and Loans Associations, women's groups, youth groups, and other groups established by NGOs) already help people comply with COVID-19 prevention measures. Members of some groups educate one another about prevention and social distancing during meetings. Other informal community groups visit members' homes to check on hand-washing facilities and other protective measures, whilst others have bought masks in bulk for distribution to members. These groups can be powerful enforcers of acceptable social norms.[21] Peers who are willing to share COVID-19 experiences within their social circles can also be effective points of influence;[17] this includes people who have taken the vaccine talking about their experiences. Other potentially influential peer groups include those found in the workplace and those linked to ongoing HIV and AIDs care and support, such as post-test clubs and family support groups. Community driven compliance (as opposed to external enforcement) can be further promoted through the engagement of these social-peer groups and community membership associations.[21]

MEDIA AND SOCIAL MEDIA

Urban Ugandans receive public health information on COVID-19 from a variety of sources. Whilst some studies suggest that information is largely obtained from TV and radio,[18,61] others indicate that many access public health advice on social media, particularly through WhatsApp and Facebook.[25] There is a need to harmonise messaging across the platforms, to avoid creating confusion through contradictory advice.

The unregulated nature of social media presents a particular dilemma, since misinformation about COVID-19 and vaccination can easily be disseminated, unchecked by public health officials. Indeed, studies indicate that whilst social media has been a key channel for communicating with the residents of urban Kampala to encourage the adoption of preventive measures, many Ugandans are concerned about the use of social media to spread falsehoods.[63]

In addition, though urban Kampala has Uganda's highest concentration of social media users, the cost and unreliability of internet are challenges for many. This presents an issue when some COVID-19 information is available only online. Areas of Kampala city have free public Wi-Fi, but it does not start until 6 pm.[62] The government periodically enacts internet "shut-downs" which block access to social media and messaging apps. For example, ahead of the national elections on 17th January 2021, internet connections were blocked for almost a month. These obstacles intersect with a pre-existing digital divide, which excludes the poorest of the poor--often women, marginalised groups, and people with disabilities--from accessing reliable internet.[64]

LANGUAGE

The main language used by RCCE actors in these three districts is Luganda. In informal settlements, most residents are Baganda and speak Luganda, but residents also include people from many other ethnic groups. This includes Ugandans from other regions of the country and international refugees such as immigrants from East Africa, India, and China. TV and radio are often only in Luganda or in English, and so are inaccessible for many informal residents. Information should be made available in other languages, especially non-Bantu languages such as Luo and Alur, and Sudanic languages such as Lugbara and Ma'di, but also Arabic, Kiswahili, Somali and other languages spoken by the large number of refugees (and traders) resident in Kampala.

Public health information could also be delivered via posters containing illustrations and infographics as an alternative or addition to textual information. These posters could be displayed in public places including places of worship, *boda boda* stages and schools, as well as in health facilities. The infographics could also be displayed via social media to achieve consistency in messaging.

WORD OF MOUTH

Word of mouth is a common route for the spread of misinformation in congested areas of Kampala,[62] and COVID-19 is a popular topic of discussion--from *boda boda* stages to hair salons.[17] There is a need to establish community feedback mechanisms that can identify myths and misconceptions at the community level in real time[17]and address them promptly. Crowded places like markets, taxi parks and *boda boda* stations also present opportunities for dialogue with different audiences. A recent large-scale RCCE programme in urban Kampala used street entertainment and megaphones in crowded locations; it also used drones in busy market areas to educate and remind people of the importance of preventive measures.[17]

GAPS IN UNDERSTANDING

Recent WHO guidance recognises that it is problematic to replicate COVID-19 prevention measures from high income countries in informal urban settlements in eastern Africa, due to their deep contextual differences. This is certainly the case in the context of Greater Kampala, where mobility-dependent livelihoods combine with socio-economic factors to impede adoption of COVID-19 preventive measures. In this context, it is essential to balance efforts to mitigate COVID-19 against the impact of those efforts on urban poverty. First, this means developing and funding social protections that allow the urban poor to protect themselves against viral risk without simultaneously

constraining their livelihoods.[33] Second, it means developing tailored and effective communication strategies to engage with informal dwellers on their own terms.

The complexities of life in urban Kampala require a nuanced understanding of its social dynamics and the evolving COVID-19-related attitudes, perceptions, and practices of its residents. There is currently a lack of real-time data on the impediments and enablers to adoption of preventive measures in urban Kampala, particularly amongst informal residents. There is also a lack of analysis specific to gender, religion, age and class within urban populations, yet the COVID-19 pandemic and associated restrictions have been experienced quite differently along these lines. This is a critical moment as Uganda lifts many of its remaining lockdown measures, and as new vulnerabilities emerge as schools and nightlife reopen. It is essential to understand the influence of these socio-demographic factors.

Social and behavioural evidence has not been a major focus of the Ugandan response to date. There have been calls for the COVID-19 response to urgently improve its connection with the social sciences, and for this input to directly inform response action. These essential connections--between RCCE and social science but also between the wider COVID-19 response and social science—need to be bolstered and fully exploited.

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