



Compliance to COVID-19 prevention measures during early phase of easing the lockdown restrictions in the Kampala metropolitan area

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Summary

On March 25, 2020, the government of Uganda instituted a total lock down and curfew in addition to other public health response measures in response to the COVID-19 pandemic. Six weeks later with little community transmission, the president gradually relaxed some of the COVID-19 lockdown restrictions. In light of an expected additional lifting of the lockdown measures we estimated the level of compliance to COVID-19 preventive measures to inform phased lifting of the lockdown. We conducted an online survey using a structured questionnaire designed using Google Docs and administered online to the general public from 8th to 15th May, 2020. We also purposively selected six sites in Kampala Metropolitan and observed practices of the general public on COVID-19 preventive measures from 10th to 13th May, 2020.

Out of the 965 respondents, only 23% were compliant with all the three key preventive measures (use of face mask in public, practicing social distance, and proper hand washing). Despite the 652 (68%) of the respondents having access to a face mask, only 293 (30%) regularly used it in public. Among the 965 respondents, 736 (83%) always practiced regular hand hygiene. However, only 496 (56%) always practiced social distancing outside of the home. Compliance to the key COVID-19 preventive measures was low. Social distancing and consistent use of face masks in public were the least adhered to while hand washing was highly complied to. We recommend more enforcement and leveraging public access to face masks if compliance to COVID-19 preventive measures in public places is to be achieved.

Background

On March 18, 2020, the government of Uganda instituted several strategies such as halting mass gatherings, closure of learning institutions, and churches to reduce the risk of importation and spread of COVID-19 in the country. However, on March 21, 2020, Uganda detected the first



case of COVID-19, a traveler who had returned from Middle East through mandatory screening of all travelers. Following this, the government instituted a number of control and prevention measures including total lock down and curfew on March 25, 2020.

Six weeks later (May 6, 2020), only 91 cases had been detected in the country, with little community transmission detected (8%). As a result, the President gradually relaxed some of the earlier restrictions. These included opening of large scale or whole sale trade, ware houses, garages, hard wares, and workshops in an attempt to spur economic growth. At the time, the Ministry was waiting for the results of the rapid assessment survey expected to establish the extent of community spread of the COVID-19 before the final position on easing the lock down could be reached. In light of an expected additional lifting of lockdown measures, it was important to understand the extent of adherence to the current recommended preventive measures. Information on adherence to the control and prevention measures was likely going to become increasingly important as human interactions would return to normal levels. We estimated the level of compliance to COVID-19 preventive measures to inform phased lifting of the lockdown.

Methods

We used a structured questionnaire designed using Google Docs and administered online to the general public from 8th to 15th May, 2020. The questionnaire was composed of questions on socio-demographics including age, sex, education level, employment status, daily life during the lock down lifting including ability to return to work and the means of transportation used, COVID-19 preventive practices including practicing social distancing outside the home, having access to a face mask, wearing a face mask in public, proper hand washing practices, shaking people's hands, and hugging people.

We also purposively selected six sites in Kampala Metropolitan and observed practices of the general public on COVID-19 preventive measures from 10th to 13th May, 2020. We selected central business district (CBD) at Ben Kiwanuka Street, Kisenyi (downtown Kampala), Parliamentary Avenue (uptown Kampala), Kireka (Kampala suburb), Katanga (informal slum settlement), and Kalerwe daily food market.

Results

Online survey

Socio-demographic characteristics of the participants during early phase of easing the lockdown restrictions in Kampala metropolitan area, May 8-15, 2020



A total of 965 persons responded to the online survey. The mean age of the participants was 39 years (13-79) and 66% (640/965) were males. More than a half, 56% (532/948) of the respondents were residents of Kampala and Wakiso. Fifty five percent (529/965) had college or university highest level of education, and 47% (450/965) were working with the private sector or self-employed or business. More than half 52% (503/965) had not yet returned to work and majority 44% (427/965) were unable to move (Table 1).

Table 1: Socio-demographic characteristics of the participants during early phase of easing the lockdown restrictions in Kampala metropolitan area, May 8-15, 2020

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The level of compliance with COVID-19 preventive measures among participants during early phase of easing the lockdown restrictions in Kampala metropolitan area, May 8-15, 2020

Overall, only 23% (222/965) of the respondents always practiced all the three key preventive measures (use of face mask in public, practicing social distance and proper hand hygiene).



Despite the (652/965) 68% of the respondents having access to a face mask, only (293/965) 30% regularly used it in public. Among the respondents, (736/965) 83% practiced regular hand hygiene. However, only (496/965) 56% practiced social distancing outside of home (Table 2).

Table 2: level of compliance with COVID-19 preventive measures among participants during early phase of easing the lockdown restrictions in Kampala metropolitan area, May 8-15, 2020

Characteristic (N=965)	Frequency (percentage)	Frequency(percentage)
Always compliant with the three preventive measures (uses facemask in public, hand washing and social distancing)	Yes 222 (23.0)	No 743 (77.0)
Always wear a face mask in public	293 (30.0)	672 (70.0)
Always practices social distancing (at least one meter from closest person)	540 (56.0)	425 (44.0)
Always practices proper hand washing and hygiene	802 (83.0)	163 (17.0)

Community Observations of public face mask use and hand washing practices in Kampala metropolitan area, May 10-13, 2020

The community observations revealed that face mask use was very low from all the Kampala sites. In all the six sites, the proportion of those wearing face masks correctly was less than 30% (table 3).

Table 3: Community observation of public face mask use among 1,167 persons at different locations in Kampala metropolitan area, May 10-13, 2020.

Venue	Correctly wearing mask (n)	Incorrectly wearing mask (n)	Not wearing mask at all (n)	Percentage wearing mask correctly
Central Business District	8	4	108	6.7
Kisenyi (down town)	30	9	270	9.7



Parliamentary avenue (up town)	35	27	93	22.5
Kireka (Kampala suburb)	5	0	200	2.0
Kalerwe foodmarket	10	5	250	3.8
Katanga (informal slum settlement)	0	0	113	0.0

Hand washing was fairly practiced compared to use of face masks with some sites such as commercial banks observed with 100% compliance (table 4).

Table 4: Community observations of hand hygiene practices before gaining access to a public place among 170 persons in Kampala city, May 10-13, 2020

Location	Hand washing (n)	Not hand washing (n)	Percentage of hand washing (%)
Kalerwe food market	75	5	94.2
Commercial bank	40	0	100.0
Office block	23	7	76.0
Super market	16	4	78.6

Discussion

In the online survey, out of the 965 respondents, only 23% were always compliant with all the three key preventive measures of COVID-19. We found that 83% of the participants always practice proper hand washing with soap, water or alcohol-based sanitizers. This observed level of compliance to proper hand washing practices in our study is higher than the 59% reported by the Uganda Demographic Health Survey project (UDHS) in 2016 (1). The levels were lower for compliance with public face mask use and social distancing as 30% of the participants reported that they always wear a face mask in public and 56% always practiced social distancing.

Findings from the online survey are in agreement with the community observations. From the community observations, we noted that there was relatively low adherence to all the three preventive measures. The public was more compliant with hand washing at most of the selected sites, followed by social distancing and use of face masks in public was the least adhered to.

Conclusion

Compliance to the COVID-19 preventive measures was low. Social distancing and consistent use of face masks in public were the least adhered to; many people were seen wearing face masks



incorrectly. Hand washing was highly complied to, possibly due to the fact that hand washing facilities were provided free of charge in most public and private places. More enforcement and leveraging public access to face masks is required if compliance to COVID-19 preventive measures in public places is to be achieved.

References

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