



Level of and Factors Associated with Failure to Access Social and Essential Health Services among Ugandans during the Covid-19 Lockdown, April 2020

Authors: Elizabeth Katana¹, Bob Omoda Amodan¹, Lilian Bulage¹, Alex R. Ario¹

Affiliation: Uganda Public Health Fellowship Program, Kampala, Uganda

Summary

On 11th March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. Many Sub-Saharan Africa countries, including Uganda, implemented curfews and lockdown, resulting in potential challenges to the continuity of essential social and health services. We documented the level of and factors associated with failure to access social and essential health services during the COVID-19 outbreak in Uganda to generate evidence-based interventions.

We evaluated data collected through the International Citizen Project online survey targeting all Ugandans about public health measures and their impact on the COVID-19 outbreak. We abstracted data on socio- demographics and key daily life aspects during the epidemic, including ability to access social or essential services and worry for health (Scale: 1 -5; 5='extremely worried'). We performed descriptive analysis and created a single binary outcome variable called failure to access essential health or social services such as food and medicines'. We used modified Poisson regression to identify factors associated with the outcome. Among 1,726 participants, mean age was 36 years (range, 12-72 years) and 1,015 (59%) were male. Seven hundred seventy-nine (45%) reported being unable to access social and essential health services. Factors associated with failure to access social and essential health services included being worried about health at all levels: Scale 5 (Adjusted Prevalence Ratio (APR)=52.3 CI:1.9-2.2), Scale 4 (APR=1.6 CI:1.3-2.1), Scale 3 (APR=1.6 CI:1.3-2.0), Scale 2 (APR=1.3 CI:1.0-1.6), and experiencing re- ported violence or discrimination during the lockdown (APR=1.4 CI:1.1-1.7).



Nearly half of respondents reported being unable to access social and essential health services during lockdown, associated with health fears and experiencing violence or discrimination during the lockdown. While results may not be broadly generalizable due to the online nature of the survey, government and public health officials might consider developing operational strategies that ensure continuity of essential services while balancing the challenges of an epidemic response.

Introduction

On 11 March 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. At the time, there were more than 4,000 deaths due to COVID 19 and about 118,000 confirmed cases, and the disease had reached every continent except the Antarctica. Much as Uganda instituted the recommended public health responses and strategies for the containment and mitigation of the epidemic, the continuity of other essential social and health services during the lockdown was of great concern. The lockdown directives allowed food markets, cargo drivers, food delivery systems and restaurants to continue operating with observance of the preventive measures, in addition to supply of some food and relief items to households in Kampala, the capital city of Uganda and its surrounding districts. However, there were frequently observed and reported requests by the public for food and relief items through local media.

We documented the level of and identified factors associated with failure to access social services (food) and essential health services (cancer care, hypertension, tuberculosis, HIV/AIDS, and other health care) needs during the COVID-19 epidemic to generate evidence-based control and prevention measures during similar public health emergencies.

Methods

We conducted a cross-sectional study based on data collected by the International Citizen Project (ICP) to assess adherence to public health measures and their impact on the COVID-19 outbreak, initiated by an international group of researchers. The protocol and questionnaire for the ICP survey is largely based on the citizen science Corona survey first launched in Belgium by the



University of Antwerp on March 17, 2020, it was adopted by 21 countries globally including Uganda in April 2020 (1).

The questionnaire was deployed on April 16, 2020, day 22 of Uganda's total lockdown, and circulated widely via email, WhatsApp, Facebook, and Twitter platforms.

For this study, we abstracted data from the ICP project data set- Uganda on key socio-demographics, data on professional life during the COVID-19 lock down (including ability to continue work, transportation means, and working conditions). We also considered data from participants' responses on daily life during the COVID-19 lock down including (access to food, talking to other people, experiencing violence or discrimination and being worried about their health), and personal health questions (including smoking habits, having underlying disease or condition and access to essential medications).

Participants who had difficulty accessing food and those who failed to access essential health services were qualified as individuals who had failed to access social and essential services during the epidemic.

We performed multivariate modified Poisson regression analysis using STATA 14 to identify the factors that were associated with failure to access social or essential health services at level of significance of 0.05. Age was considered at multivariate analysis as it is commonly perceived that older age groups are expected to face challenges.

Results

Socio-demographic characteristics of Ugandans during the COVID-19 epidemic, April 2020

Our study considered all the 1,726 ICP study respondents whose mean age was 36 years ranging from 12 to 72 years. Majority of the respondents 59% (1,015/1,726) were males, 97% (1,679/1,726) were Ugandans and majority (864/1,726) had tertiary maximum level of education (50%). Forty four percent (754/1,726) were legally married, majority (49%) were currently living with a spouse or partner (841/1,726), 62% (1,070/1,726) were living with housemates



under 12 years while those with housemates above 70 years were 10% (179/1,726). Forty percent (688/1,726) resided in Kampala suburbs, 17% (300/1,726) had an underlying disease, 40% (697/1,726) resided in a house or apartment with a garden, 20% (481/1,726) belonged to the 4th wealth quintile, and 8% (145/1726) reported to have experienced any form of violence or discrimination since the start of the epidemic.

Level of failure to access social and essential health services among Ugandans during the COVID-19 lockdown, April 2020

Overall, 45% (779/1,726) of the respondents were not able to access social and essential health services during the epidemic. Forty three percent (734/1,726) reported that they had difficulty obtaining food in the last week with the major reasons for difficult to obtain food being not having had no money as reported by 47% (348/734), food being expensive as reported by 35% (255/734) while 12% (90/734) of them felt like it was unsafe to go out and buy food.

On a scale of 5, only 17% (297/1,726) reported that they were extremely worried about their health in the past week. Thirty six per- cent (107/300) of those who had an underlying or chronic condition reported that they had experienced difficulties in accessing medication since the epidemic started and 13% (40/300) had completely discontinued medication in the past week. Fifty five percent of those (22/40) who had completely discontinued medication in the past week cited failure to get transport means to the health facilities, 15% (6/40) reported there was no medication at health facilities while 3% (1/40) reported no health workers at the health facilities as the major reasons for discontinuing medication use.

Factors associated with failure to access social and essential health services among Ugandans during the COVID-19 lock- down, April 2020

At multivariate analysis, after adjusting for covariates, the prevalence odds of failure to access social and essential health services were higher for participants who were worried about their health in the past week of the epidemic, (measured on a scale of 5); Extremely worried Scale 5 (Adjusted PR=52.27 CI:1.88-2.176), Scale 4 (Adjusted PR=1.63 CI:1.26-2.11), Scale 3 (Adjusted PR=1.62 CI: 1.32-1.99) and Scale 2 (Adjusted PR=1.27 CI:1.01-1.61). The prevalence



odds of failure to access social or essential health services were 1.39 higher for participants who reported that they had experienced any form of violence or discrimination (Adjusted PR=1.39 CI:1.13-1.72). All other factors assessed including, maximum education level, housing conditions, residence, marital status, occupation and wealth index were not statistically significant.

Discussion

Almost fifty percent of the accessed participants were not able to access social and essential health services during the COVID-19 epidemic lock down. Forty three percent of the participants reported that they had difficulty obtaining food in the past week. This survey reported a high level of difficulty to access food compared with the average of 11 percent of the Ugandan population that was reported to be food insecure in 2014 according to the Food and Agriculture Organization of the United Nations (FAO)(2).

According to FAO, food availability and access is not considered a limiting factor in most of the regions of Uganda except in Karamoja, East Central and West Nile where prolonged dry spells frequently affect production(2). Given our study design, only a certain group of people was reached as 50% of the respondents in this study where residents of Kampala district who are generally expected not to have any food security issues in terms of prices and availability and only 10% of the participants resided in a rural area or village. This relatively high level of failure to access social and essential services by individuals in a region that is presumed considerably food secure indicates that the lockdown had an impact on the availability and prices of food in the central region.

This survey reported a lower level of failure to access health services compared to more than half (67%) of the urban respondents in a survey done to assess the level of health care access during the large Ebola virus epidemic in Liberia in 2013. This difference between our findings and this survey in Liberia could be explained by the fact that they targeted and enrolled participants from all households countrywide (3). Experiences from previous epidemics including Ebola, Zika, and SARS have shown that Public Health Emergencies tend to exacerbate existing health or



related problems such as weaknesses in health system strengthening and access to routine care and other essential social services(4). This further highlights the need to monitor the level of failure to access social and essential health services and associated factors among Ugandans during COVID-19 epidemic and future similar outbreaks.

Conclusion

The overall level of failure to access social and essential health services was relatively high associated with being worried about health and experiencing any form of violence or discrimination. We recommend consideration of all aspects of essential social and health care services while putting in place control and prevention measures during large scale public health emergencies.

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