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# THE EFFECTS AND CHALLENGES OF COVID-19 LOCKDOWN ON SOCIAL-ECONOMIC SUSTAINABILITY IN UGANDA: AN EXPLORATORY STUDY OF SLUM AREAS IN KAMPALA.

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#### **Abstract**

The occurrence of COVID-19 pandemic has had an unparalleled worldwide effect, with almost no country left untouched. With the first case reported in Uganda on the 21<sup>st</sup> of March, 2020, the impact of this pandemic is not limited to the health population alone but on the economy and socio-well-being of the majority populace. The Government of Uganda anticipated efforts to limit and contained the spread of the covid-19 pandemic slowing down the economic, socio-activities, and educational program of the country while the ability of the people to meet their daily income were all affected negatively.

As many Ugandans dwelling in the low-income area of Bwaise slums of Kawempe area of Kampala were unable to go out for their daily wages, businesses activities were paralyzed, supply chains were disrupted and salaries becomes unavailable while family sustenance cut-off due to restrictions of movement and night curfews as means of curbing the spread of the global pandemic which informed the lockdown period. This article adopted an exploratory study of the impact and effects of the lockdown due to covid-19 pandemicon the inhabitant of the Bwaise slums and the consequences on their socioeconomic life activities. It concluded with measures taken to containing the outbreak and the significant consequences on the welfare, the economy of the poorest and most vulnerable and the wellbeing of the people of the slums in Uganda.

**Keywords:** Uganda slum, Covid-19 pandemic, socioeconomic, Covid impact, Ugandan lockdown

#### 1. Introduction

The challenge of the outbreak of the Covid-19 pandemic is an unprecedented universal impact with no exemption of countries and cities worldwide. It caused high mortality rate and morbidity which had a number of implications on the social and economic status of slum dwellers in Kampala. With the first case confirmed on the 21st of March, 2020, the ugly health pandemic had a severe impact on many slum dwellers not limited to health issues only but on the acute shortage of basic needs like food, healthcare, and education among others (Nuwematsiko et al., 2022). The challenges of COVID-19 increased the risks of malnutrition among children as they were unable to access the right diets to support their healthy (Lirri, 2020). Therefore, in Uganda like most countries in Africa introduced a general lockdown, movement restrictions, night curfews to hinder and curb the unprecedented spread of the global virus notably restricting the movement of the people, non-essential services, educational

institutions, prayer and worshipping centers, shopping malls, large congregation of people, entertainment centers were all placed on closure as mechanism to curb the spread and contacting the ravaging virus. Despite all these measures, Uganda recorded a cumulative high rate of 127,618 confirmed cases and 3,252 recorded deaths during the sad period. (WHO, 2021). Subsequently, the Government compulsory handwashing with soap, enforcing the uses of sanitizers, uses of face masks, mandated physical distancing, advised covering of the mouth during sneezing in the public as means for preventing the anticipated fast spreading of the pandemic in Uganda.

However, the Government intervention measures from down-to-top approach had negative socio-economic and health repercussion on the vulnerable people and the low-income settlers in the informal communities such as the slums in Bwaise of Kawempe area of Kampala and many others. These communities were known for their lack of basic infrastructural facilities such as health care centers, socio-amenities, portable and hygienic drinking water systems, proper sewage and drainage, and waste disposal system are all lacking due to improper and illegal settlement of the people.

## 1.1 Objectives and Purpose of the study

This study aims to examine and explore the consequences of covid-19 on the socio-economic sustainability of the dwellers of the slum areas in Kampala. Other objectives include the following;

- i. To compare the proportion of slum dwellers who were accessing food at a low and high level after the outbreak of COVID-19 in Kampala.
- ii. To compare the proportion of slum dwellers who were affected with access to water and sanitation/hygiene services after the outbreak of COVID-19 in Kampala
- iii. To compare the proportion of slum dwellers who were affected with daily incomes and employment after the outbreak of COVID-19 in Kampala
- iv. To compare the proportion of slum dwellers who were affected with access to health care and those who developed mental health problems after the outbreak of COVID-19 in Kampala.

#### 2. Conceptual Literature

Since the inception of China's Originated Virus in December 2019(COVID-19), the global pandemic has affected global businesses, causing higher global morbidity and mortality with no records of countries unaffected. This is a rapidly spreading healthy pandemic and fatal infectious viral diseases-like severe acute respiratory syndrome (SARS). The outbreak of the global pandemic had an unprecedented global effect on socioeconomic and societal well-being slowing down global economic activities and movement restrictions. In Uganda, lockdowns were introduced across cities, and countries borders were shut down except for essential services(Usman et al., 2022). The ban on people's movement was among several measures to contain the spread of the diseases thereby introducing social distancing measures, hands sanitizers and hand washing, the wearing of compulsory face masks at public gatherings, sensitization campaigns, public awareness, and various security measures across the country by ensuring public adhering to the various measures put in place to contained the fatal infectious diseases. To lessen the fatal spread of the pandemic within Uganda, the government enforced the close-down of schools, mandated physical distancing, countrywide lockdowns,

and closures of workplaces and offices. The impacts of the government measures to hinder the spread of the pandemic met the populace in an adverse and hostile hardship with severe economic, social, psychological, and negative health well-being (MOH, 2020). However, the measure taken to prevent infectious diseases resulted in severe consequences and implications for the vulnerable people in the slums area on their social and economic status as low-income earners. The severe consequences led to lack of wages, shortage of food, insecurity, sexual violence, family anxiety, unwanted pregnancies, teenage mothers, and lack of basic sanitation and health care services. Instead of mitigating the socio-economic status of the people in the slums, the opposite was the case.

### 3. Methodology

The study used a descriptive design with only quantitative approaches to study the implications that resulted from the effects and challenges of covid-19 lockdown on social-economic sustainability in slum areas in Kampala. The study adopted secondary data sourced from the study conducted by Nuwematsiko et al. (2020) on unintended socio-economic and health consequences of COVID-19 among slum dwellers and many other similar kinds of literature on the subject under study. The information from the study by Nuwematsiko et al. (2022) was granted free access through BMC Public Health Journal. The study used descriptive statistics, a normality test, and two samples (independent sample t-test) to make a comparative analysis between the variables. The study opted for an independent sample t-test because it is widely used when making a comparative analysis between two independent variables (Skaik,2015).

#### 3.1 Discussion of the Results

This section presents the descriptive statistics, test for normality and the study findings on the comparative analysis on the socioeconomic consequence of covid-19 among the slim dwellers in Kampala area of Uganda.

#### 3.2 Summary of statistics and normality test

Table 1 below presents the summary of statistics and normality test results of the study variables.

**Table 1: Descriptive Statistics and Normality Test** 

Variables	N	Minimu	Maximu	Mean	Std. Dev	P-value
		m	m			(Shapiro-
						Wilk
						normalit
						y test)
Proportion of	2	12.9	33.3	20.562	5.6803	0.248*
slum dwellers	1					
who were						
accessing food at						
low level after						
Covid-19 in						
Kampala						
Proportion of	2	66.7	87.1	79.438	5.6803	0.248*
slum dwellers	1					

who were						
accessing food at						
high level after Covid-19 in						
Kampala	2	4.04	22.50	11 272	0.74000	0.160*
Proportion of	3	4.94	22.59	11.373	9.74889	0.162*
slum dwellers				3		
who were						
affected with						
accessing water						
after Covid-19 in						
Kampala						
Proportion of	3	4.71	19.29	10.430	7.78067	0.318*
slum dwellers				0		
who were						
affected with						
accessing						
Sanitation/hygien						
e services after						
Covid-19 in						
Kampala						
Proportion of	3	1.05	86.13	30.893	47.8880	0.089*
slum dwellers				3	7	
who were						
affected with						
incomes after						
Covid-19 in						
Kampala						
Proportion of	3	4.00	63.13	24.076	33.8256	0.031
slum dwellers			00110	7	5	0.001
who were				,		
affected with						
employment after						
Covid-19 in						
Kampala						
Proportion of	3	6.2	25.4	12.700	10.9995	0.026
slum dwellers		0.2	23.4	12.700	10.7773	0.020
who were						
affected with						
domestic violence						
after Covid-19 in						
Kampala						

Proportion of slum dwellers who were	3	5.9	27.8	13.600	12.3122	0.093*
affected with						
family welfare						
after Covid-19 in						
Kampala						
Proportion of	3	6.1	32.0	15.200	14.5661	0.092*
slum dwellers						
who were						
affected with						
household						
lighting after						
Covid-19 in						
Kampala						
Proportion of	3	4.0	52.7	21.567	27.0363	0.141*
slum dwellers						
who were						
affected with						
household						
cooking energy						
after Covid-19 in						
Kampala						
Proportion of	3	3.1	20.9	9.500	9.8975	0.135*
slum dwellers						
who were						
affected with						
access healthcare						
after Covid-19 in						
Kampala						
Proportion of	3	5.4	40.2	17.333	19.8094	0.048
slum dwellers						
who were						
affected with						
mental health						
after Covid-19 in						
Kampala						
*Indicates that the	varia <del>ble</del> is	normally dis	tributed at 3	5% significa	ance le <del>vel</del>	

\*Indicates that the variable is normally distributed at 5% significance level

# Source: Researchers own computations from the work of Nuwematsiko et al. (2022)

Table 1 presents the summary of statistics of the study variables. The results show that variables with p-value above 0.05 level of significance (denoted with asterisk (\*)) were normally distributed, thus were appropriate for the two-sample t-test (independent sample t-test) for comparative analysis.

# 3.3 Comparing the proportion of slum dwellers who were accessing food at low and high level after the outbreak COVID-19 in Kampala

The first objective of the study was to compare the proportion of slum dwellers who were accessing food at low and high level after the outbreak COVID-19 in Kampala. The study sought to find out whether most of the slum dwellers were highly affected with accessing food or not after the times of COVID-19 in Uganda. The level of access was distributed across different social-economic indicators. The findings are presented in table 2 using two sample t-test.

Table 2: Two sample t-test results comparing the proportion of slum dwellers who were accessing food at low and high level after the outbreak COVID-19 in Kampala

Two-sample	e t test w	ith equal va	riances		<u> </u>	
Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf	. Interval]
Low_ac~s High_a~s	21 21	20.5619	1.239537 1.239537	5.680271 5.680271	17.97628 76.85247	23.14753 82.02372
combined	42	50	4.678259	30.31858	40.55206	59.44794
diff		-58.87619	1.75297		-62.41907	-55.33331

но.	<pre>diff = mean(Low_access) diff = 0</pre>	- mean(High_access)	dearees	t = -33.5865 of freedom = 40
	Ha: diff < 0	Ha: diff != 0	-	Ha: diff > 0

#### Source: Researchers own computations from the work of Nuwematsiko et al. (2022)

The results from the comparative analysis show that there was a significant difference in the proportion of slum dwellers who were accessing food at low and high level after the COVID-19 times in Kampala (mean diff=58.9%, P-value (0.000) <0.05). It is observed from table 2 that majority of the slum dwellers could highly access food after COVID-19 (average of 79%) compared to those who would access food at lower level (average of 20.6%). From our own observation, there was plenty of food in the markets during and after COVID-19 because of the slow recovery of some sectors like tourism and hotel and hospitality sectors.

# 3.4 Comparing the proportion of slum dwellers who were affected with access to water and sanitation/hygiene services after the outbreak COVID-19 in Kampala

The second objective of the study was to compare the proportion of slum dwellers who were affected with access to water and those affected with sanitation/hygiene services after the outbreak COVID-19. The proportion of household slum dwellers who were affected with access to water and sanitation/hygiene services were distributed according to those who were highly, moderately, and lowly affected. The findings are presented in table 3 using two sample t-test at 5% significance level.

Table 3: Two sample t-test comparing the proportion of slum dwellers who were affected with access to water and sanitation/hygiene services after the outbreak COVID-19 in Kampala

Two-sample	+	test	with	egual	variances

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Access~r Acces~ne	3	11.37333	5.628524 4.492171	9.748889 7.780668	-12.84425 -8.898252	35.59092 29.75825
combined	6	10.90167	3.227456	7.905619	2.605228	19.19811
diff		.9433333	7.20138		-19.0509	20.93757
diff =		ss_to_water)	- mean(Acce		of freedom	
	iff < 0	Pr(	Ha: diff !=			iff > 0 ) = 0.4511

### Source: Researchers own computations from the work of Nuwematsiko et al. (2022)

The findings from table 2 show that there was no significant difference in the proportion of slum dwellers who were affected with access to water and those affected with access to sanitation/hygiene services after the outbreak COVID-19 in Kampala at 5% significance level (mean diff=0.9%, P-value (0.9021)>0.05). The findings may imply that the proportion of household slum dwellers who were affected with access to water after the outbreak COVID-19 was almost the same as that of the household slum dwellers affected with access to sanitation/hygiene services. However, those affected with access to water (11.4%) were slightly above those affected with access to sanitation/hygiene services (10.9%).

# 3.5 Comparing the proportion of slum dwellers who were affected with daily incomes and those affected with employment after the outbreak COVID-19 in Kampala

The third objective of the study was to compare the proportion of slum dwellers who were affected with daily incomes and those affected with employment after the outbreak COVID-19 in Kampala. The findings are presented in table 4 at 5% significance level.

Table 4: Two sample t-test comparing the proportion of slum dwellers who were affected with daily incomes and those affected with employment after the outbreak COVID-19 in Kampala

Two-sample t test with equal variances Variable Obs Std. Err. Std. Dev. [95% Conf. Interval] Daily ~s 30.89333 27.64819 47.88807 -88.06724 Employ~t 3 24.07667 19.52925 33.82565 -59.95091 6 27.485 15.21467 37.26818 -11.62555 66.59555 combined -87.16566 100.799 diff 6.816667 33.84988 diff = mean(Daily\_incomes) - mean(Employment) Ho: diff = 0 Ha: diff < 0 Ha: diff != 0 Ha: diff > 0 Pr(T < t) = 0.5749Pr(|T| > |t|) = 0.8502Pr(T > t) = 0.4251

### Source: Researchers own computations from the work of Nuwematsiko et al. (2022)

The findings from table 4 revealed that there was no significant difference in the proportion of slum dwellers who were affected with daily incomes and those affected with employment after the outbreak COVID-19 in Kampala at 5% significance level (mean diff=6.8%, P-value (0.8502)>0.05). The findings may imply that the proportion of slum dwellers who were affected with daily incomes and those affected with employment after the outbreak COVID-19

was almost the same. Meanwhile, those affected with daily incomes and wages were slightly higher (30.9%) compared to those affected with employment (24.1%).

# 3.6 Comparing the proportion of slum dwellers who were affected with domestic violence and those affected with family welfare after the outbreak COVID-19 in Kampala

The fourth objective of the study was to make a comparative analysis and establish whether there was a difference in the proportion of slum dwellers who were affected with domestic violence and those affected with family welfare after the outbreak COVID-19 in Kampala. The findings are presented in table 5 below.

Table 5: Two sample t-test comparing the proportion of slum dwellers who were affected with domestic violence and those affected with family welfare after the outbreak COVID-19 in Kampala

Two-sample t test with equal variances

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
Domest~e Family~e	3	12.7 13.6	6.350591 7.108446	10.99955 12.31219	-14.62439 -16.98517	40.02439 44.18517
combined	6	13.15	4.267611	10.45347	2.179758	24.12024
diff		9	9.532051		-27.36522	25.56522
diff =	= mean(Domest = 0	ic_viole~e)	) - mean(Fam		t of freedom	= -0.0944 = 4
	iff < 0	Pr( 5	Ha: diff !=			iff > 0 ) = 0.5353

### Source: Researchers own computations from the work of Nuwematsiko et al. (2022)

The findings from the comparative analysis show that there was no significant difference in the proportion of slum dwellers who were affected with domestic violence and those affected with family welfare after the outbreak COVID-19 in Kampala (mean diff=0.9%, P-value (0.9293)>0.05). The findings may imply that the percentage of household slum who were affected with domestic violence was more or less the same as that of dwellers affected with family welfare. Thus, the growth in domestic violence after covid-19 could be attributed to the decline in family welfare among slum dwellers in Kampala.

# 3.6 Comparing the proportion of slum dwellers who were affected withhousehold lighting and those affected with cooking energy after the outbreak COVID-19 in Kampala

The study sought to compare the proportion of slum dwellers who were affected with household lighting and those affected with cooking energy after the COVID-19 times in Kampala. The findings are presented in table 6 using two sample t-test.

Table 6: Two sample t-test comparing the proportion of slum dwellers who were affected with household lighting and those affected with cooking energy after the outbreak COVID-19 in Kampala

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]	
Househ~g Househ~y	3	15.2 21.56667	8.409717 15.60943	14.56606 27.03633	-20.98409 -45.59531	51.38409 88.72864	
combined	6	18.38333	8.056195	19.73357	-2.325775	39.09244	
diff		-6.366667	17.7307		-55.59499	42.86165	
diff = mean(Household_ligh~g) - mean(Household_cook~y) t = $-0.3591$ Ho: diff = 0 degrees of freedom = 4							
	iff < 0 ) = 0.3688	Pr(	Ha: diff != T  >  t ) =			iff > 0 ) = 0.6312	

### Source: Researchers own computations from the work of Nuwematsiko et al. (2022)

The results in table 6 reveal that the proportion of slum dwellers who were affected with household lighting was not significantly different from that of the dwellers who were affected with access to cooking energy after the outbreak COVID-19 in Kampala (mean diff=6.4%, P-value (0.7377)>0.05). This means that the percentage of slum dwellers who were affected with household lighting was the same as those affected with access to cooking energy after the outbreak COVID-19 in Kampala. However, those affected with cooking energy (21.6%) were a bit higher compared to those affected with household lighting. Given the nature of economic activities of the slum dwellers, their incomes were highly affected during Covid-19 and this consequently affected their level of access to some cooking energy as compared to lighting.

# 3.7 Comparing the proportion of slum dwellers who were affected with access to health care and those who developed mental health problems after the outbreak COVID-19 in Kampala

The last objective of the study was to compare the proportion of slum dwellers who were affected with access to health care and those who developed mental health problems after the outbreak COVID-19 in Kampala. The findings are presented in table 7 using two sample t-test.

Table 7: Two sample t-test comparing the proportion of slum dwellers who were affected with access to health care and those who developed mental health problems after the outbreak COVID-19 in Kampala

Two-sample t test with equal variances

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]	
Acces~re Mental~h	3	9.5 17.33333	5.71431 11.43698	9.897474 19.80943	-15.08669 -31.87601	34.08669 66.54267	
combined	6	13.41667	5.979934	14.64779	-1.955243	28.78858	
diff		-7.833333	12.78506		-43.33035	27.66369	
diff = mean(Access_to_heal~e) - mean(Mental_health) t = -0.6127 Ho: diff = 0 degrees of freedom = 4							
	iff < 0 ) = 0.2866	Pr(	Ha: diff !=			iff > 0 ) = 0.7134	

Source: Researchers own computations from the work of Nuwematsiko et al. (2022)

The findings presented in table 7 show that there was no significant difference in the proportion of slum dwellers who were affected with access to health care and those who developed mental health problems after the outbreak COVID-19 at 5% significance level (mean diff=7.8%, P-value (0.5732)>0.05). The findings indicate that the proportion of slum dwellers who were affected with access to health care was almost the same as those who developed mental health problems after Covid-19 times in Kampala. On the other hand, the percentage of slum dwellers who developed mental health problems (17.3%) was slightly above those who were hindered with access to health care (9.5%) in Kampala. This means that growth in mental health problems after covid-19 could be attributed to limited access to health care services from hospitals.

### 4.0 Conclusions

The study concludes that the effect and challenges of the outbreak of Covid-19 in Uganda had a lot of implications on the household slum dwellers in Kampala. The effect and challenges of the outbreak of Covid-19 in Uganda had negative consequences on; access to water, access to sanitation/hygiene services, daily income, employment, domestic violence, family welfare, access to household lighting, access to household cooking energy, access to healthcare, and development of mental health.

#### 5.0 Conclusion and Recommendations

It is worthy to understand that covid-19 is not just an infectious disease that inflicted terrible economic pandemic that triggered global crisis on health and economic downturn. The effects continue to be more severe globally among the low income and vulnerable people in the country who are without social safety nets. As slums continues to grow in sizes and population, the more the socioeconomic challenges will continue to grow and enlarge there by putting human basic needs such as food, access to cooking energy, daily income and wages are becoming prominent.

The study recommendations that the government should increase on the supply of water to slum areas around Kampala. Through KCCA, the government should also promote awareness campaigns to improve on the hygiene and sanitation in slum areas. The study suggests that there should be economic empowerment programs that should target the people in slums areas around Kampala since their incomes and employment were highly affected during Covid-19. The study also suggests that there should be mental health programs that should be implemented in slum areas in order to reduce on the growing number which resulted from the outbreak of Covid-19 in Uganda. The pandemic had negative impact on teenagers' education, domestic violence, and domestic violence.

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