Covid-19 Containment Measures and their Effect on Socio-Economic Wellbeing of Uasin Gishu County Government Staff, Kenya

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Abstract
COVID-19 was a major health emergency worldwide; countries were forced to adopt quarantine measures and other restrictions because of the highly infectious nature of COVID-19. It is in this context that the study sought to investigate the effect of the containment measures on socio-economic wellbeing of Uasin Gishu County Government Staff, Kenya. The specific objectives of the study were: to determine the influence of implementation of COVID-19 behavioural protocols on socio-economic wellbeing of staff of Uasin Gishu County Government; to assess the impact of implementation of COVID-19 fiscal measures on socioeconomic wellbeing of employees of Uasin Gishu County Government; and to determine the influence of implementation of COVID-19 macro-financial measures on socioeconomic wellbeing of employees of Uasin Gishu County; The study adopted an explanatory mixed method research design. The target population comprised 6,400 employees in Uasin Gishu County. The study employed stratified sampling and simple random sampling techniques to select the respondents. The sample size consisted of 10 heads of departments and 198 employees of Uasin Gishu county government. The data collection tools were questionnaire and interview guide. The data collected was analyzed using descriptive statistics including mean, percentages and frequencies; chi-square was used to test the hypotheses. Inferential statistics was also used. Analysis by the implementation of COVID-19 behavioural protocols as a containment measure shows that the P-value = .000 was less than the Alpha level 0.05. Therefore, there was statistical significance relationship between behavioral COVID-19 containment measures and socio-economic wellbeing of employees of Uasin Gishu County Government. Behavioural measures such as lock down highly disrupted businesses’ sourcing and distribution functions, which in turn affected the socio-economic wellbeing of the local population. The study recommended that financial organizations should offer trainings to the masses to embrace saving and empower them to participate in multiple economic activities; this would ensure that in any of any occurrences such as COVID 19, the businesses would have the resilience to cope.

Key words: COVID-19; Containment measures; Socio-economic Wellbeing

1. Introduction
The study was guided by the following objective: To determine the influence of implementation of COVID-19 behavioural protocols on socio-economic wellbeing of staff of Uasin Gishu County Government. To assess the impact of implementation of COVID-19 fiscal measures on socioeconomic wellbeing of employees of Uasin Gishu County Government. To determine the influence of implementation of COVID-19 macro-financial measures on socioeconomic wellbeing of employees of Uasin Gishu County.

Pandemic is a widespread occurrence of infectious disease over a whole country or the world at a particular time, which impacts on communities causing damage, disruptions and casualties, and leaving the affected communities unable to function normally (Twig, 2007). Covid-19, just like any other pandemic experienced by the world, had direct, indirect and intangible losses; it created a lot of panic and uncertainty among employers and employees just as...
other natural disasters and war do. The direct losses created by pandemics include damages to people in form of sickness and death; the indirect losses do affect society by disrupting or damaging utility services and local businesses and therefore leading to loss of revenue and increase in cost of survival; the intangible losses include psychological impairments caused by both direct and indirect losses that individuals personally suffer during the pandemic (Petrucci, 2012). This study investigates the effect of Covid-19 containment measures on the society’s wellbeing so as to find solutions of tackling socio-economic aspects of such pandemic in future for the common good of the employees and employers in an organization.

A study by Ozili (2020) sought to establish the condition of African nations, in respect to national economic performance and the COVID-19 influence on them. The study pointed out that most of the nations had adopted complete quarantine and lockdown to control the spread of the virus. The study findings showed that the COVID-19 was bringing serious financial crises and could even result to recession (Ozili, 2020).

A study was conducted on the impact of COVID-19 control measures on social contacts and transmission in Kenyan informal settlements by Quaife et al. (2020). They collected contact data from residents of informal settlements around Nairobi, Kenya, to assess if control measures have changed contact patterns, and estimate the impact of changes on the basic reproduction number ($R_0$). They conducted a social contact survey with 213 residents of five informal settlements around Nairobi in early May 2020, 4 weeks after the Kenyan government introduced enhanced physical distancing measures and a curfew between 7 pm and 5 am. Respondents were asked to report all direct physical and non-physical contacts made the previous day, alongside a questionnaire asking about the social and economic impact of COVID-19 and control measures. They examined contact patterns by demographic factors, including socioeconomic status. They described the impact of COVID-19 and control measures on income and food security and compared contact patterns during control measures to patterns from non-pandemic periods to estimate the change in $R_0$. The results showed that control measures reduced physical contacts by 62% and non-physical contacts by either 63% or 67%, depending on the pre-COVID-19 comparison matrix used (Quaife et al., 2020).

Masks were worn by at least one person in 92% of contacts. COVID-19 control measures have had a large impact on direct contacts and therefore transmission, but have also caused considerable economic and food insecurity. Reductions in $R_0$ are consistent with the comparatively low epidemic growth in Kenya and other sub-Saharan African countries that implemented similar, early control measures. However, negative and inequitable impacts on economic and food security may mean control measures are not sustainable in the longer term (Quaife et al., 2020). The study focused on how COVID-19 control measures impacted on social contacts and transmission while the current study deals with how the containment measures affected socio-economic wellbeing of the staff of Uasin Gishu County.

A research study was conducted by Kithiia, Wanyonyi, Maina, Jefwa, and Gamoyo (2020), who examined the socio-economic impacts of Covid-19 restrictions: Data from the coastal city of Mombasa, Kenya. The data was collected using online questionnaires directed at the city residents. The data highlights the mobile gender gap resulting from gender inequalities, residents’ reliance on the government for Covid-19 information but lack of trust for government interventions, inadequate provisions of essential services, and the residents’ lack of preparedness to tackle similar challenges in the future (Kithiia, et. al., 2020). This study focused mainly on the preparedness of the government to tackle challenges that emanated from Covid-19 pandemic whereas the current study focuses on how the containment measures affected socio-economic wellbeing of the staff of Uasin Gishu County.

In research on global impact of covid-19 pandemic carried out by Roqaiya (2020), a complete collection of 90 days records (WHO situation reports) of the pandemic were studied and relevant information were extracted to prepare a working model of dataset. Several statistical measures such as regression, variance, distributions, t-Test and ANOVA test were conducted to understand and explore the on-going situations and to predict the fore-coming scenario, rate of growth and possible risk assessment of the pandemic. Apart from this, an inclusive model of time series analysis of each case has been prepared to predict the expected time for which the pandemic can sustain or rise eventually. It was concluded that the novel corona virus pandemic had suffered from three different phases of transmission, linear, non-increasing and asymptotic exponent. At the end of the paper, the rate of growth along with the growth estimation curve of each case (in a general model) had been developed to estimate the fluctuation of maxima and minima (Roqaiya, 2020). This study dealt with general impact of Covid-19 on the society whereas the current study focuses on how the containment measures affected socio-economic wellbeing of the staff of Uasin Gishu County.

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A study on gendered economic, social and health effects of the COVID-19 pandemic and mitigation policies in Kenya was conducted by Pinchoff et al. (2021). They found out that in crisis settings, women disproportionately bear the brunt of the effects of food insecurity with both short-term and long-term implications for health and well-being. Due to pandemic mitigation policies and movement restrictions, county government entities across Kenya have begun to close local, informal, outdoor markets where a majority of food is distributed. To combat the negative economic, social and health-related impacts of COVID-19 mitigation measures, initiating government assistance in the form of cash transfers or food distributions may be critical, along with increasing safe and affordable access to needed health services to prevent secondary outbreaks.

A study carried out by Muhingi (2021) revealed that child abuse increases in times of economic or natural disasters such as COVID-19. The study focused on school closure and social distancing as a way of containing the pandemic, in view of exploring the possibility of it causing social isolation, particularly for children who may already be living in an abusive environment. The researcher adopted a desktop review of the literature. Search engines were used to collect data from articles between 2008 and 2020 and most concentrated around 2019-2020. The study found out that many children had lost touch with schools, health personnel, child protection agencies, and other caring adults, which increased their chances of being abused. In conclusion, child abuse has increased during the pandemic, and efforts to protect children have diminished in the recent past.

An investigation on COVID-19 variables’ impacts on the changing distributions of travel and leisure industry returns was carried out by Lee and Chen (2021) across 65 countries via a quantile regression model that uses daily data from December 2019 to May 2020 to provide early evidences from a panel of countries. The study findings indicated that the change rate in COVID-19 deaths exerts more substantial negative effects on industry returns at majority quantiles' than does the impact from the number of confirmed cases. The latter number only saliently and negatively influences the lowest return quantiles, revealing a nonlinear effect of confirmed cases. The study identifies a V-shape correlation between the number of cases recovered and travel and leisure industry return (i.e., a negative impact at the lower quartiles, but a positive impact at higher quartiles) across return quantiles. This likely denotes that confirmed cases grow exponentially and that their effect may overwhelm the impact of the number of recovered cases. Lastly, this study presents a positive correlation between government response stringency indexes and returns (Chen, 2021). This study dealt with general impact of Covid-19 on travel and leisure industries while the current study focuses on how the containment measures affected socio-economic wellbeing of the staff of Uasin Gishu County.

COVID-19 was a major health emergency worldwide. Countries are forced to adopt quarantine measures because of the highly infectious nature of COVID-19. However, these precautionary measures had negative economic impacts on businesses and workers. The country has witnessed job cuts across various sectors, and incomes of businesses and available working hours for staff have fallen significantly (COG & amp; KIPPRA, 2020). Scholars have conducted research on COVID-19. Helfers, Mutua and Muyesu (2021) did a study on the impact of COVID-19 pandemic on peace and security in Kenya. The finding was that the containment measures seemed to have disrupted various peace and security spaces like; sporting activities that according to many would bring people together reduced police patrols that used to keep criminals and other people with intentions of disrupting peace. According to the reviewed studies, no research has been conducted on COVID-19 mitigation policies and movement restrictions, county government entities across Kenya have begun to close local, informal, outdoor markets where a majority of food is distributed. To combat the negative economic, social and health-related impacts of COVID-19 mitigation measures, initiating government assistance in the form of cash transfers or food distributions may be critical, along with increasing safe and affordable access to needed health services to prevent secondary outbreaks.

The study was guided by Socio-technical Systems Theory put forward by Eric Trist, Ken Bamford and Fred Emery in 1960. The theory states that the technical subsystem comprises the devices, tools and techniques needed to transform inputs into outputs in a way which enhances the economic performance of the organization. The social system comprises the employees (at all levels) and the knowledge, skills, attitudes, values and needs they bring to the work environment as well as the reward system and authority structures that exist in the organization (Brooks & Giawel, 2001).

2. Research Methods
The study adopted explanatory mixed method research design. The target population comprised of 6,400 employees in Uasin Gishu County. The study employed stratified sampling and simple random sampling techniques to select the respondents. The sample size consisted of 10 heads of departments and 198 employees of Uasin Gishu county.
The data collection tools were questionnaire and interview guide. The data collected was analyzed using descriptive statistics including mean, percentages and frequencies; chi-square was used to test the hypotheses. The purpose of chi-square test in this study was to determine if a difference between observed data and expected data was due to chance, or if it was due to a relationship between the variables the researcher was studying.

3. Analysis Result
From the sampled staff of Uasin Gishu county government, 53.2% of the staff was female while 46.8% were male. This enabled the researcher to collect data from a good representation of both male and female respondents. The respondents enumerated various covid-19 containment measures that were implemented in Uasin Gishu County, which are classified into three categories: behavioural protocols, fiscal measures and macro-financial measures.

3.1 Relationship between Behavioural Protocols and Socioeconomic Wellbeing of Employees
The relationship between implementation of COVID-19 behavioural protocols and socioeconomic wellbeing was tested using Chi-square test of independence at 95% confidence interval; this is because COVID-19 behavioural protocols were measured in an ordinal scale (expressed into five levels) and socioeconomic wellbeing of employees of Uasin Gishu County Government was also reported in five levels, as a categorical variable.

Table 1 COVID-19 Behavioural Protocols and Socioeconomic Wellbeing of Employees

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>832.439</td>
<td>16</td>
<td>.030</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>548.829</td>
<td>16</td>
<td>.065</td>
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<tr>
<td>Linear-by-Linear Assoc</td>
<td>27.563</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>190</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 showed that the p-value was 0.030. Since the p-value was less than 0.05, there was significant relationship between implementation of COVID-19 behavioural protocols and socioeconomic wellbeing of employees of Uasin Gishu County Government, Kenya. The findings were supported by Moochi and Mutswenje (2022) who established that behavioural measures such as lock down highly disrupted the SMEs sourcing and distribution functions, which in turn affected the socio-economic wellbeing of the local population. It was difficult for SMEs to source raw materials and supplies from other counties, and to distribute their goods to other counties. Curfew and social distancing affected the businesses by limiting the number of customers that could be served at a time, hence reducing access to important commodities by the citizens and also reducing profits for the traders.

3.2 Relationship between Fiscal Measures and Socioeconomic Wellbeing of Employees
The implementation of COVID-19 fiscal measures and socioeconomic wellbeing was tested using Chi-square test of independence at 95% confidence interval since COVID-19 fiscal measures were measured in an ordinal scale (expressed into five levels) and socioeconomic wellbeing of employees of Uasin Gishu County Government was also reported in four levels, as a categorical variable.

Table 2 COVID-19 Fiscal Measures and Socioeconomic Wellbeing of Employees

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymptotic Significance (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>1408.197</td>
<td>16</td>
<td>.000</td>
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<tr>
<td>Likelihood Ratio</td>
<td>711.187</td>
<td>16</td>
<td>.020</td>
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<tr>
<td>Linear-by-Linear Assoc</td>
<td>30.709</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>190</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 2 showed that the p-value was 0.000, which was less than 0.05. This implied that there was significant relationship between implementation of COVID-19 fiscal measures and socioeconomic wellbeing of employees of Uasin Gishu County Government, Kenya. Employment and business opportunities in Kenya’s informal settlements were quite rapidly affected by COVID-19 from the second quarter of 2020. The small scale and informal businesses that operated in Kenya’s informal settlements had experienced significant reduction in profits and income
due to the low purchasing power of the citizens, as well as the reduction of business hours due to the curfew, and insecurity that had led to the closure of businesses in some parts of various towns. During the pandemic, most casual labour jobs which were available to many town dwellers were drastically reduced or were no longer available. Some town dwellers were declared redundant due to the closure of small and medium enterprises (Muhula, et. al., 2021).

3.3 Relationship between Macro-Financial Measures and Socioeconomic Wellbeing of Employees
The implementation of COVID-19 macro-financial measures and socioeconomic wellbeing was tested using Chi-square test of independence at 95% confidence interval because COVID-19 macro-financial measures were measured in an ordinal scale (expressed into five levels) and socioeconomic wellbeing of employees of Uasin Gishu County Government was also reported in four levels, as a categorical variable.

| Table 3 COVID-19 Macro-financial Measures and Socioeconomic Wellbeing of Employees |
|---------------------------------|-----------------|-----------------|
| Pearson Chi-Square              | 1378.531        | Asymptotic Significance (2-sided) |
| Likelihood Ratio                | 721.214         | .000            |
| Linear-by-Linear Association    | 54.786          | .000            |
| N of Valid Cases                | 190             |                 |

From Table 3, the p-value was 0.012, which was less than 0.05. This implied that there was significant relationship between implementation of COVID-19 macro-financial measures and socioeconomic wellbeing of employees of Uasin Gishu County Government, Kenya. As a result of COVID-19 containment measures, people either lost their livelihoods completely or at least partially. This had a direct negative effect on consumption and levels of savings in their families (Baldwin, 2020). A reduction in savings meant a significant diminishing investment and thus diminished capital stock. This defeated the gains made in the fight against poverty in various parts of Kenya, including Uasin Gishu County.

4. Conclusions
In conclusion, remote work presented distinct health concerns, including effects on physical ergonomics and mental health, as a result of the implementation of COVID-19 behavioural regulations. Social isolation and decreased victim safety were results of social distance. Increased incidents of violence were caused by stress and coping techniques including drinking more alcohol, which had an impact on the socioeconomic welfare of workers. Curfews, closing of open-air markets, isolation and quarantine, bans on public events, flight suspensions, shortened working hours, and social seclusion all resulted in a reduction in the availability of safe and cheap health care. Lockdown procedures increase social unrest and jeopardize employees' attempts to address the socioeconomic well-being crisis.

Fiscal measures such as construction/assignment of isolation units generated the fear that impact of the containment measures could kill, hence a feeling of neglect and marginalization of healthcare needs among the infected employees. In view of the substantial financial disruptions to families and workplaces, the experience of uncertainty and dread in response to the pandemic was described as a stressful scenario with effects on the emotional and physical health of both adults and children. Due to the high rates of parental stress and fatigue brought on by job loss, families with children often struggle to meet basic needs of the family, such as food.

Macro-financial measures such as unpaid leave to employees, reduced wages and early retirement for the elderly slowed income of the family and this could lead to a greater prevalence of mental health problems among employees. Loan holidays for citizens among other macro-financial measures benefited individuals in both public and private despite the obvious negative implications of the pandemic. This motivated employees during pandemic crisis. Employees not having their salaries intact, lead to fear and uncertainty of the health risks in addition to the stress caused by ensuing restrictions and constraints on everyday life caused major disruptions, impacted financial, emotional and physical well-being of adults and children of employees of Uasin Gishu County Government.

5. Recommendations
From the findings and conclusions of the study the following were the recommendations made by the researcher:
(i) The study established that many families suffered greatly due to lack of sufficient resources to cope with the challenges posed by COVID 19. Financial organizations should offer trainings to the masses to embrace saving and empower them to participate in multiple economic activities. This would ensure that in any of any occurrences such as COVID 19, the businesses would have the resilience to cope.

(ii) The study found that the employees of Uasin Gishu county government and residents of the county suffered from financial difficulties and losses following the implementation of COVID 19 containment measures. In this regard, the banking and microfinance are institutions are recommended to actively consider extending loans to the SMEs on favourable conditions in order to help them rebuild their businesses.

(iii) The government is urged to establish a dedicated national disaster intervention fund to support the citizens and small business enterprises after COVID19. The government is recommended to establish efficient procedures and regulations to manage the intervention fund and educate the population on basic disaster preparedness skills.

(iv) The police forces should be given further training on ways of handling the masses and on disaster management.

References


