An Assessment of the Level of Compliance to Guidelines for Prevention of Covid-19 in Public Places in Iganga District, Uganda

Prossy Nakito *, David Muwanguzi , Daniel Lukooya , Gloria Tumukunde

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Article

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Introduction

The global ongoing COVID-19 pandemic remains a major public health crisis of our time. In an effort to mitigate the outbreak of the deadly COVID-19 pandemic, WHO rolled out the COVID-19 SOPs to ensure the virus is controlled. The effectiveness of these COVID-19 SOPs mitigation measures is highly dependent on cooperation and compliance of all members of society.(Report, 2020).

Globally, a study which was conducted in the United Kingdom, found out that most but not all citizens had complied with COVID-19 SOPs guidelines; Majority (80%) of UK citizens reported avoiding public places and 77% indicated that they improved their personal hygiene e.g., washing hands (Nguyen et al., 2020). In the Sub-Saharan Africa, a study conducted in Nigeria by (Nnama-Okechukwu CU, 2020) findings indicated that a majority of the respondents believed that COVID-19 pandemic is more of a hoax than reality, of which poor knowledge negatively affected their compliance with preventive measures to curb the spread of COVID-19. This isn't any different in the context of East Africa as reported by COVID-19 Pandemic Rapid Evidence Synthesis Group (COVPRES), hence suggested that poor knowledge negatively affect the level of compliance to COVID-19 SOPs.

A study conducted in Uganda by Ssebuufu, Sikakulya, Binezero, Wasingya, Nganza, Bwaga and Kyamanywa (2020), findings indicated that there is lack of knowledge, attitudes and practice on SOPs among a certain group of population (drivers and security agents). In an effort to mitigate the outbreak of the deadly COVID-19 pandemic, Uganda government joined other countries to roll out the COVID-19 SOPs and enacted the Public Health (Control of COVID-19) Rules, 2020. In addition, Presidential Directives were also issued. All these were to be implemented in various places to ensure the pandemic is prevented in Iganga district among other areas. However, while all these policies, directives exist and being enforced to some extent, there was increased community spread of the pandemic in Iganga district.

Therefore, the study was conducted with the aim of assessing the level of compliance to guidelines for prevention of COVID-19 in public places in Iganga District so as to guide decision makers in amending policies and making recommendations towards the entire public in order to prevent community acquisition and spread of COVID-19.

Methodology

Study Site

The study was conducted in Iganga district located in Busoga sub-region, covering an area of approximately 1,046.75sqkm with a population of 408,300 (UBOS, 2020). The study was conducted in Iganga public places that included; gazzetted markets, public transport stations and financial banks in the district. The researcher decided to use this area because it had a high population traffic and literature synthesis on COVID-19 reveals that the virus is spread fast where there is high population traffic (Mboowa et al., 2020), thus the choice of the study area.

Study Population

The study population was public places in Iganga district which included: financial banks, public transport stations and gazzetted markets. The population was heterogeneous and as such it enabled the researcher to get first-hand information as observed hence daily practices in regards to SOPs compliance.

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Study Design

The study used Cross-sectional study design which involved use of quantitative methods (Observational checklist) for data collection. This facilitated the investigator to obtain information on study variables. This approach involved the collection of data using an observational checklist and data was numerically analyzed with statistical procedures.

Sample Size

The sample size in this study was determined using the table which was developed by Krejcie and Morgan (1970), population proportion (assumed to be 50 since this would provide the maximum sample size) and a degree of accuracy expressed as a proportion (0.05). The final sample size was 16 public places which included; 3 gazzetted markets, 5 public transport stations and 8 financial banks in Iganga district.

Inclusion Criteria

All public places thus markets, financial banks and public transport stations in Iganga district that were in operation at the study time were included in the study.

Exclusion Criteria

All public places that were not in operation at the time of study and any public place outside Iganga district were excluded. Additionally, private places which don't or didn't attract public interactions of people at the study time were also excluded in the study.

Data Collection Methods and Tools

Data was collected using observation method and the tool was observational checklist using another independent person to verify the data collected by the researcher for validity and reliability purpose. Observational checklist was used to captured data elements which included; temperature screening, wearing of face masks, hand washing or sanitizing, social distancing of at least 2 meters, and information display on COVID-19 Dos and Don'ts.

Quality Control

Data collection tool was pre-tested in Jinja District prior to the main data collection exercise. The observation checklist was checked while still in the field for completeness and those found incomplete were completed before departure from the study sites.

Study Variables

The independent variables were the COVID-19 SOPs which included: temperature screening, wearing of face masks, hand washing or sanitizing, social distancing of at least 2 meters, and information display on COVID-19 Dos and Don'ts. The dependent variable was the level of compliance.

Data Management and Analysis

Data Management

Using the observational checklist YES score 1 and NO score 0, 10 indicators were assessed which in the guideline for public transport, markets and financial banking they must adhere to, the indictors included: temperature screening, wearing of face masks, hand washing or sanitizing, physical distancing of at least 2 meters, information display on COVID-19 Dos and Don'ts, regular cleaning of public service places, cleaning of communal places, adequate ventilation, adequate waste management facilities and cleanliness of the work area. The researcher calculated the compliance by dividing the number of correct actions performed by the total number of indicators and report the

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observed compliance with infection prevention and control practices for each domain. The overall compliance of public places was graded according to their individual scores using a determined scale as seen below.

0-2 Poor

3-5 Fair

6-8 Good

9-10 Excellent

Each indicator is important because public places must practice these indicators to prevent transmission of COVID-19 pathogens in public places.

Data Analysis

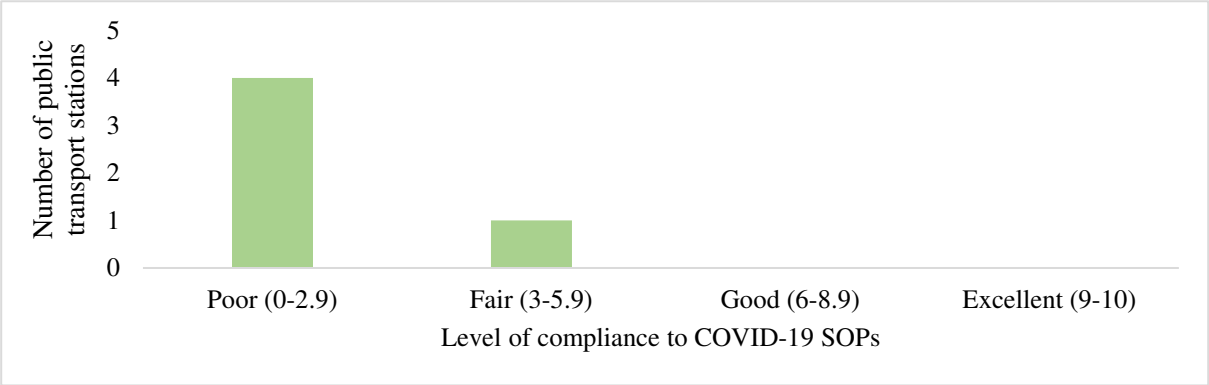
All data that was collected was edited and checked for consistence. The raw data was entered, cleaned and analyzed using Microsoft Excel 2019 spread sheet packages to generate tables and bar graphs. All the three objectives were determined using frequencies and proportions.

Results

Using a data abstraction form sixteen (16) public places were enrolled which included: three markets, five public transport stations and eight financial banks.

Level of Compliance to COVID-19 Guidelines for Use of Public Transportation during the COVID-19 Pandemic in Iganga district

Based on results from figure 1, majority 4(80%) of the public transport stations included in the study were observed to be poorly (0-2.9) complying with covid-19 SOPs, while only 1(20%) of the public transport stations was observed to be fairly (3-5.9) complaint to the SOPs.



Source: Field Data (2020)

Figure 1. A graph showing the number of public transport stations and their level of compliance to COVID-19 SOPs in Iganga district.

Level of Compliance to COVID-19 Guidelines for Prevention of COVID-19 in Financial Banks in Iganga District

Results from figure 2, revealed that majority of the respondents 6(75%) of the Financial Banks were observed to have Excellent (9-10) compliance levels to COVID-19 SOPs, and 2(25%) of the Financial Banks included in the study were observed to have good (6-8.9) compliance to COVID-19 SOPs.

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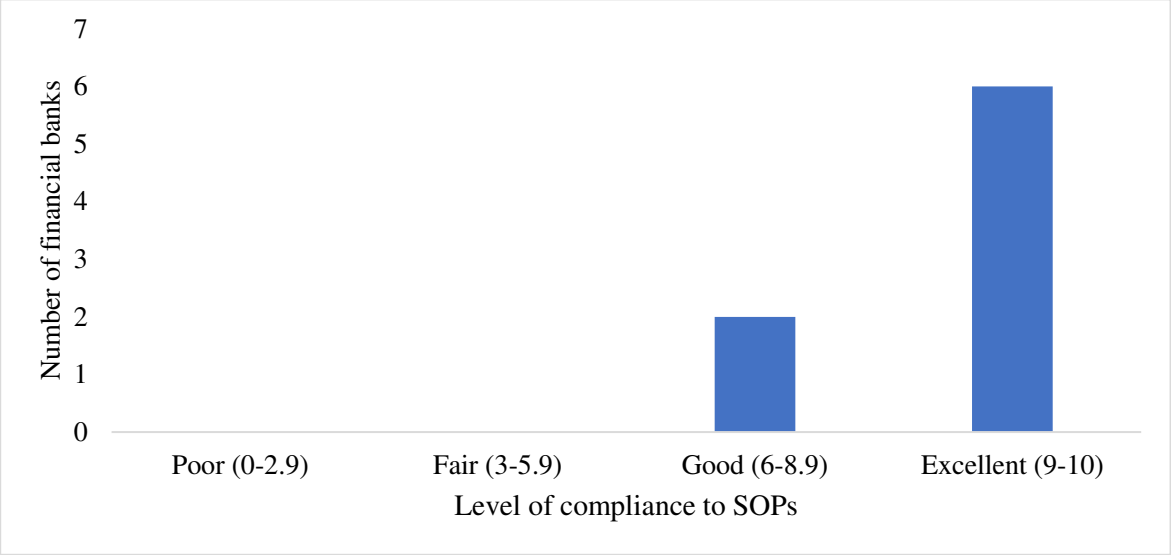

Source: Field Data (2020)

Figure 2. A graph showing the number of Financial Banks and their compliance levels to COVID-19 SOPs in Iganga district.

Level of Compliance to COVID-19 Guidelines for Prevention of COVID-19 in Market Places in Iganga District

Results from Table 2 below shows that more than a half 2(66.7%) of the Market places included in the study were observed to have Poor (0-2.9) compliance levels to COVID-19 SOPs, while only 1(33.3%) of the Market places was observed to have Fair (3-5.9) compliance levels to COVID-19 SOPs.

Table 2. Level of compliance to COVID-19 guidelines for prevention of COVID-19 in Market places in Iganga district.

Compliance	No. of Gazette Markets	Percentage (%)
Poor (0-2.9)	2	66.7
Fair (3-5.9)	1	33.3
Good (6-8.9)	0	0
Excellent (9-10)	0	0
Total	**3**	**100**

Source: Field Data (2020)

Discussion

The study revealed that overall, 80% of the public transport stations included in the study were observed to be poorly compliant to covid-19 SOPs and only one of the stations was observed to be fairly complaint to the SOPs. This overall poor compliance to COVID-19 SOPs could be explained by gap of knowledge, attitude and practice among the public transport stations in Iganga district.

This finding concurs with (Ssebuufu et al., 2020) whose study found out that there is still a knowledge gap on COVID-19 SOPs among drivers, business entrepreneur and security. The poor level of compliance could also be due to challenges with management practices, human resource, material and financial resources. This is supported by a study conducted by (Kitara and Ikoona, 2020)

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of which the findings recommended that for effective management of the COVID-19 pandemic, there is need for simultaneous multiple public health interventions through a structured leadership that in part may contribute to reasonable and timely control of the pandemic. These programmes may include effective and tailored health education programs aimed at improving COVID-19 knowledge (Ferdous et al., 2020), (Hao et al., 2020). Further the low level of compliance might be due to the faulty temperature guns on the market as stated by Anthony who described temperature checks as "notoriously inaccurate,"(Slade and Sinha, 2021).

We also found out that 75% of the Financial Banks were observed to be excellently complying with COVID-19 SOPs and 25% were observed to be good at complying with the SOPs. This overall excellent compliance to COVID-19 SOPs could be explained by availability of knowledge, attitude and practice among the Financial Banks in Iganga district. The knowledge, attitude, and practices (KAP) people hold towards COVID-19 play a major role in the way they accept measures put in place to curb its spread and their willingness to seek and adhere to care. This finding concurs with a study by (Adela et al., 2020) in Cameroon on "Knowledge, attitudes, practices of or towards COVID 19 preventive measures and symptoms. Furthermore, a synthesis of the literature on COVID-19 SOPs in Sub-Sahara Africa are in support of the above explanation (Nnama-Okechukwu et al., 2020), (Puspitasari et al., 2020). The banks and the employees therein could be very cautious to protect themselves and their families against COVID-19, this is in support of a study conducted in Uganda which reported that nearly all individuals reported having done something to protect themselves and their families from COVID-19 (Mboowa et al., 2020). In addition, the banks could be complying with the COVID-19 SOPs because of the closed environmental conditions (air conditioners) for which its employees are exposed, which are generally riskier than open environments. This is supported by a study which was conducted by Kähler which revealed that aerosols can accumulate and remain infectious in indoor air for hours, which is the greatest challenge for public places and the resuming of day-to-day human activities in other closed environments (Kähler and Hain, 2020).

In addition, the study found out that that, 66.7% of the market places included in the study were observed to be poorly complying with covid-19 SOPs and 33.3% of the market places were observed to be fairly complaint to the SOPs. Generally, of the three market places considered in this study, none of the individuals (0%) in the market had a temperature screening system and washed or sanitized their hands among others while entering the market. The hand washing facilities available had no water and soap. The low compliance levels could be as a result of lack of enforcement of SOPs in these public places majorly the markets. This is supported by a study which was conducted by (Ssematimba et al., 2020) which revealed the need to properly enforce SOPs in crowded places due to the ways of life in such communities to help limit disease spread. The poor compliance to COVID-19 SOPs could be explained by slits of knowledge, attitude and practice among the market vendors in Iganga district since it plays a bigger role in the way they take up the control measure and willingness to seek and adhere to care. This finding concurs with by (Ssebuufu et al., 2020) who found out that there is still a gap in knowledge, attitude and practice among business entrepreneur of which market vendors are also among them. This is could be also due to the fact that some people still believe that Covid-19 pandemic isn't real or doesn't exist. This is was in line with a study which was conducted in Nigeria by (Nnama-Okechukwu et al., 2020) whose findings indicated that a majority of the respondents believe that the COVID-19 pandemic is more of a hoax than reality, of which poor knowledge negatively affected their compliance with preventive measures to curb the spread of COVID-19. The study recommended dissemination of accurate information to ensure compliance with preventive measures.

In General, the low level of compliance among all the three different types of public places could be due to lack of innovative ideas to allow easy use of masks to avoid its inconvenience to the people who wear them. This is supported by a study which was conducted by Treadwell on a new technique aimed at increasing compliance fast and economic cardboard cutout use to increase compliance of face mask wear during COVID-19 pandemic. Using mask has become both necessity and legal foundation and because of this, a sudden surge in demand and low availability of masks, SOPs

regarding their use have been formulated. These guidelines recommend an increase in duration and reusing the masks hence increase compliance (Treadwell, 2020).

Study Strength and Limitation

This study had strengths; among them was the large sample size enough for a robust estimate of the outcome with a very good response rate of 100%. The results from this study therefore, may be used to draw conclusions about levels of compliance to SOPs for COVID-19 in public places in Iganga district and other areas of a similar setting. Observation method was the most appropriate tool to collect data while assessing presence of some logistics or practices. Like any research, this study draws attention to some of the unavoidable constraints that is this study used observational checklist for data collection, there were likely chances of observer bias, however, this was managed by the researcher being objective and staying focused to the research purpose.

Conclusion

The findings indicated that generally there is very low level of compliance to COVID-19 SOPs in all public places in Iganga District. This calls for urgent attention by the decision makers in Iganga district to improve compliance with COIVID-19 SOPS by ensuring that the Iganga community practices, temperature screening, wearing of face masks, hand washing or sanitizing, social distancing of at least 2 meters, information display on COVID-19 Dos and Don'ts among others so as to positively improve on the level of compliance. Since the research relied on observational method of data collection, there is need to conduct research on the factors associated with low level of compliance to COVID-19 SOPs among individuals in public places. Also, level of compliance in the risk groups for Covid-19 that is to say Health workers, security personals, cleaners and Boda bodas among others.

Recommendations

We recommend that the Ministry of Health and policy makers should engage all relevant stakeholders in designing feasible strategies to increase the level of compliance with COVID-19 SOPs in public places. Also, the District Health Task Force (DHTF) together with Uganda Police should ensure regular inspection and enforcement of SOPs in public places, risk communication and support supervision of all inspectorate staff in the district. Lastly the MoH together with the DHTF to ensure adequate logistic supplies in all public places.

Ethical Approval

To ensure authenticity of the results, permission was sought from Makerere University School of Public Health and also from Iganga District Health Office. In addition, an informed consent was sought from the management of each of the public place. The information obtained was kept confidential and anonymity was maintained throughout the study by using random codes not attaching any name to all data elements captured by the investigator.

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